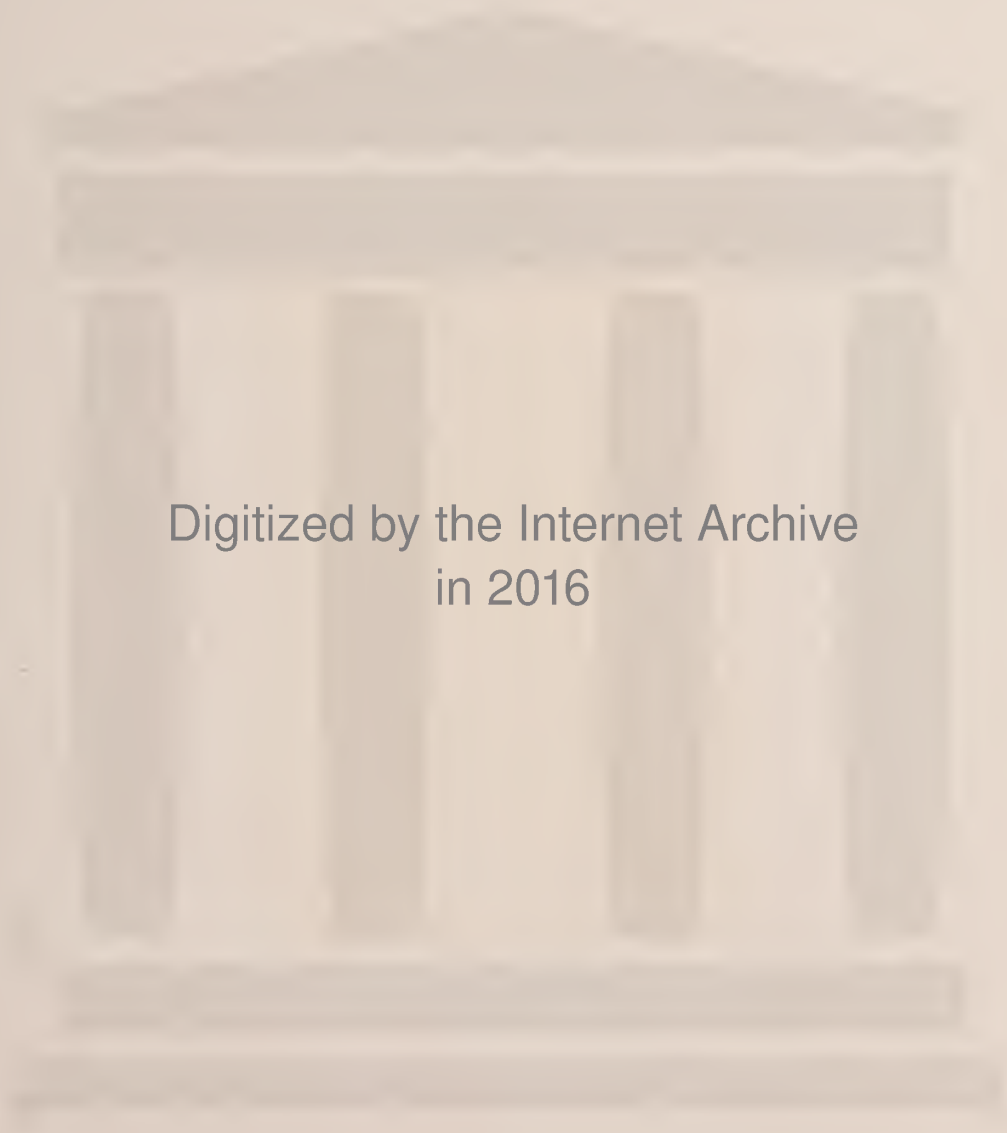
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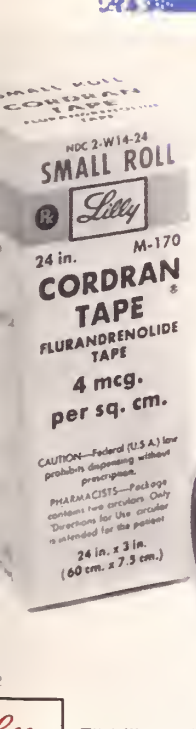
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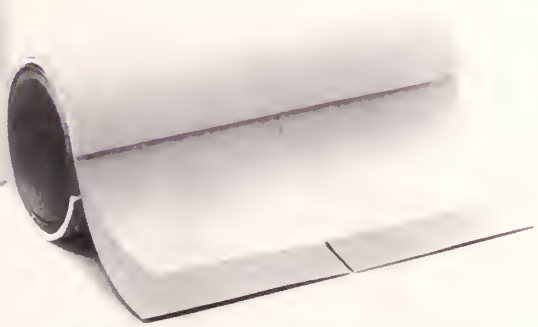
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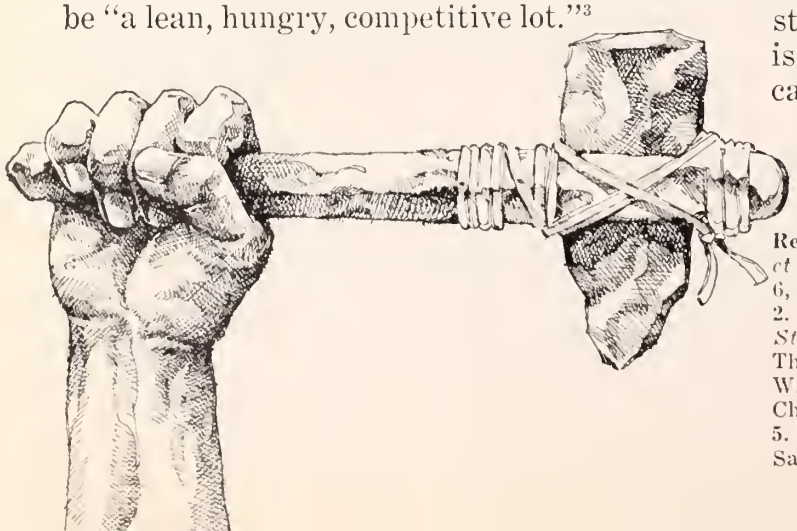
IF MORE MEN CRIE



At least seventy-five out of one hundred adults with duodenal ulcers are men.[1] Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."[2]

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."[2]

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."[3]



Big boys don't cry. If more men cr maybe fewer would wind up with duod ulcers. But men will be men—the sum tot their genes and what t are taught. Schottst observes that wh mother admonishes son who has hurt him that big boys don't cry, is teaching stoicism.[4] Crying is negation of everyth society thinks of as ma A boy starts defending manhood at an early

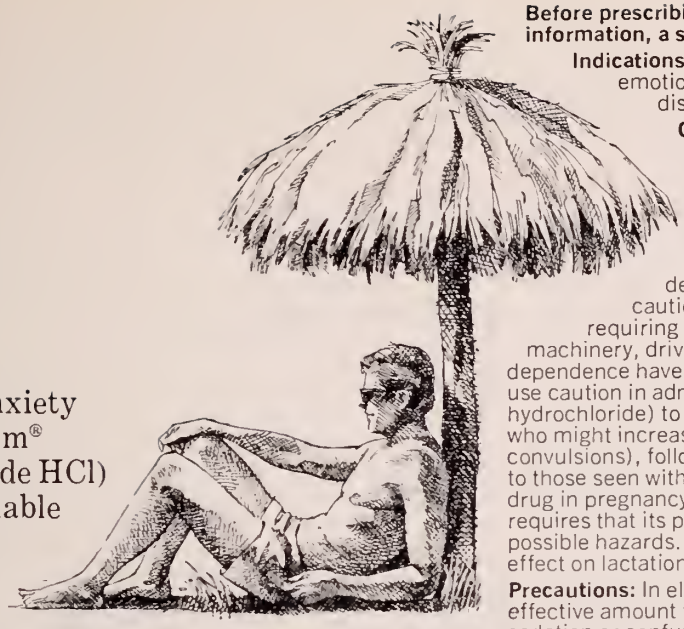


Take away str you can take away sympto

There is no question that stress pla role in the etiology of duodenal ul Alvarez[5] observes that many a man with ulcer loses his symptoms the day he shuts the office and starts out on a vacation. problem is, the type of man likely to have ulcer is the type least likely to take l vacations or take it easy at work.

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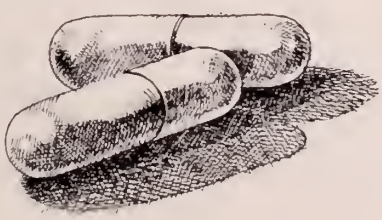


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Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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CONTENTS

ORIGINAL PAPERS

Direct Coronary Revascularization 1 CARLOS M. CHAVEZ, M.D., and J. HAROLD CONN, M.D.

A New Horizon in Cancer Therapy: Immunotherapy 6 R. B. THOMPSON, M.D.

SPECIAL ARTICLE

Radiologic Seminar CXIII: Empty Sella Turcica 14 W. L. RONE, M.D.

EDITORIALS

The Percentage Numbers Game: A Travesty Upon Medical Dignity 17 Phase II Fallacies

Forty-seven Ways to Be Worse Off 19 Professional Liability Dilemma

Central Medical Is Leading the Way 20 Amphetamine Moratorium

THIS MONTH

The President Speaking 16 'We Accept, Mr. President'

Medical Organization 25 Foundation and EMCRO Move Ahead for Quality

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aria, serum sickness, pruritus, exfoliative dermatitis,
hylactoid reactions, periorbital edema, conjunctival and
al injection, photosensitization, arthralgia and allergic
arditis; *gastrointestinal reactions:* nausea, emesis, ab-
inal pains, hepatitis, diarrhea, anorexia, pancreatitis and
atitis; *C.N.S. reactions:* headache, peripheral neuritis,
tal depression, convulsions, ataxia, hallucinations, tin-
, vertigo and insomnia; and *miscellaneous reactions:*
fever, chills, toxic nephrosis with oliguria and anuria,
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NEWSLETTER

January 1972

ear Doctor:

ecognition by AMA of fire ant stings as substantial sources of mor-
idity and mortality was a victory for Mississippi delegation. Drs.
. Swink Hicks and C. D. Taylor, Jr., presented resolution at recent
ew Orleans meet in effort to upset policy forbidding use of Mirex
nd view that fire ant is not a health hazard. Old policy was work
f ultra-ecologists who fought Mississippi resolution.

State association's AMA delegates were supported by two key witnesses, Hon. Jim Buck Ross and Dr. Faser Triplett. Agriculture commissioner emphasized economic damage of fire ant, while Dr. Triplett reported extensive investigation of morbidity and documented deaths from stings.

EW Secretary Elliot Richardson has threatened 37 states and D.C.
ith cutoff of federal Medicaid support. He said that substantial
eficiencies in nursing home certification and inspection procedures
ust be corrected by Feb. 1 and that every participating nursing
ome must be inspected by July 1. Mississippi was among states.

bill has been introduced in Congress to permit retired military
o continue under CHAMPUS after age 65. Present law requires bene-
iciary to go under Medicare at 65 unless he has never been under
ocial Security. Measure is S. 2673 by Sen. Thurmond and would per-
it retiree to select either CHAMPUS or Medicare after 65.

hree million units of blood were transfused in nation's 5,800 hos-
itals during last six months of 1971. Blood programs in hospitals
upplied 21 per cent of blood, while 41 per cent came from Red Cross,
1 per cent from community banks, 14 per cent from commercial banks,
nd remainder from other sources.

tate association's "Blue Sheet" will be back weekly this month,
oiling down actions of Legislature for physicians. Program needs
octors-of-the-Day to serve at Capitol in Jackson. And another
eminder on 1972 dues which will be rebilled to those not yet pay-
ng. Early payment will help staff concentrate on legislation.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Rhode Island Gets Brain Disorder Center

A diagnostic and research center devoted to detecting brain disorders in juvenile delinquents has been established by the Rhode Island Training Schools. The center's director, Dr. Allan Berman, University of Rhode Island assistant professor of psychology, believes the center to be the first of its kind in the country.

Funded with $28,000 from the U. S. Department of Justice under the 1968 Safe Streets Act, the center represents a new approach toward rehabilitation of juvenile offenders.

Psychologists have long noted a link between juvenile delinquency and neurological disorders, Dr. Berman said. Behavior in delinquents is sometimes similar to that seen in brain-damaged children, they have found. Social scientists theorize that violent delinquent behavior may often stem from a brain or nerve disorder preventing the delinquent from experiencing normal feelings. Thus the youngster may behave violently to satisfy a need for "kicks," he added.

"Past rehabilitation practices have been based on the assumption that a youngster becomes delinquent only because of social or emotional problems. Many times neuropsychological factors in a delinquent are ignored. "The result of this approach has contributed to a vicious cycle in delinquent rehabilitation in which rehabilitationists may make demands on the young person to regulate behavior over which he has little voluntary control. The delinquent often becomes worse after such treatment, and may be incorrectly deemed incorrigible."

"Even though there have been indications of a correlation between delinquency and brain disorders," Dr. Berman explained, "there is virtually no organized, published research on the subject.

"Our studies of organizations throughout the country indicate that nowhere is there a single, comprehensive, scientifically-designed and operated facility for studying the neurological characteristics of delinquents," he added.

The newly-established Rhode Island neuropsychological laboratory will help remedy the lack of neurological information on delinquents by providing a battery of 10 to 15 tests to show how the young offender perceives and reacts to the world around him. Included in the battery will be measures of concept formation, emotional and stress reaction, social perception, intelligence and pain perception.

"Our aim is to find how the delinquent experiences the world around him—how he views his

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Richard Winkelmann, M.D., Rochester, Minn.—*Dermatology*
H. Worth Boyce, Jr., M.D., Washington, D.C.—*Gastroenterology*
J. Jerome Wildgen, M.D., Kalispell, Mont.—*General Practice*
William A. Little, M.D., Miami, Fla.—*Gynecology*
Sol Sherry, M.D., Philadelphia, Pa.—*Internal Medicine*
Noble Fowler, M.D., Cincinnati, Ohio—*Internal Medicine*
Frank H. Mayfield, M.D., Cincinnati, Ohio—*Neurosurgery*
C. D. Christian, M.D., Ph.D., Tucson, Ariz.—*Obstetrics*
Roderick Macdonald, Jr., M.D., Louisville, Ky.—*Ophthalmology*
J. T. Hartman, M.D., Lubbock, Tex.—*Orthopedic Surgery*
Robert B. Lewy, Jr., M.D., Chicago, Ill.—*Otholaryngology*
John Bernard Henry, M.D., Syracuse, N.Y.—*Pathology*
Arnold P. Gold, M.D., New York, N.Y.—*Pediatrics*
George N. Stein, M.D., Philadelphia, Pa.—*Radiology*
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Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.

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family, his friends, and society in general.

"The data from those tests will be used by the personnel in Rhode Island's Youth Correctional facilities to fit the young men and women into the best treatment method for their individual problems. After analyzing information from a large group of delinquents, we plan to publish our findings for social scientists and rehabilitation experts around the country," Dr. Berman explained.

The new neuropsychology diagnostic and research laboratory is based in the Rhode Island Training School for Girls, serving all of Rhode Island's youth correctional facilities. The center will be integrated into the overall state system for helping Rhode Island juvenile offenders. Under direction of Dr. Berman, URI graduate students will man the center while working toward advanced degrees in psychology.

"We hope not only to provide information leading to effective treatment of Rhode Island youngsters, but also to do urgently-needed research to point the way toward new treatment methods and theories," Dr. Berman said.

"As more is learned about the neurological problems of juvenile delinquents, staff at the training school will be able to modify old treatments, and start new ones to make their treatment more effective.

"Eventually we hope to reach the point where we can use our tests to predict future delinquency problems in young children. Then we might be able to help them before they start on the road to delinquency."

Arizona Plans Cardiac Symposium

The Arizona Heart Association has scheduled its Fifteenth Annual Cardiac Symposium for Jan. 21-22, 1972, at Mountain Shadows Resort Hotel in Phoenix.

Guest speakers include Drs. Eugene Braunwald, Nina S. Braunwald, Thomas N. James, and Andrew G. Wallace.

For further information, write the Arizona Heart Association, 1720 E. McDowell Road, Phoenix, Ariz. 85006.

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DATELINE

Sen. Nelson Seeks New Super Agency

Washington - Sen. Gaylord Nelson (D., Wis.) has introduced S. 2812 to create a new super agency for control of prescription drugs and OTC products. Measure would create National Drug Testing and Evaluation Center, exercising life-and-death controls on research, manufacture, sale, and use of drugs. Center would have say-so on advertising.

Kaiser Sued for Refusing Procedure

Los Angeles - Kaiser-Permanente, the largest prepaid, closed panel group in U.S., is being sued for $40,000 for refusing sterilization to male patient. Procedure was refused on grounds patient is young and childless. Purpose of suit, says Zero Population Growth, is to force hospitals and physicians to sterilize on request.

Heroin Antagonist Is Being Developed

Washington - The nation is close to having a reliable heroin antagonist, according to the Pharmaceutical Manufacturers Association. Department of Defense says it has antagonist now. Six drug makers, Winthrop, Endo, Bristol, Ciba-Geigy, McNeil, and one who desires anonymity, all report progress.

CMA Initiates Major Communications Plan

San Francisco - The California Medical Association, always an innovator, has initiated a major communications campaign with regional advertising in top print media. Latest is full page in West Coast edition of Newsweek, "Have You Bought Any Snake Oil Lately?" In addition to quackery, program also covers care delivery, costs, and peer review.

BNDD Sets 'Speed' Limit for 1972

Washington - The Bureau of Narcotics and Dangerous Drugs has set manufacturing maximums on amphetamines and methamphetamines at 60 per cent of 1971 output. Main reason is that production is in excess of nation's medical need, resulting in diversion of drugs to illicit channels. Physician-imposed moratoriums also decrease demand.

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Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

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Caution, very close observation, and careful adjustment dose are necessary when: insulin is withdrawn during the period in order to avoid ketosis, acidosis, and coma; thiaz diuretics are administered which may result in aggravation diabetic state and increased tolbutamide requirement, tem rary loss of control, or even secondary failure; treating patie with impaired hepatic and/or renal function and debilitated, nourished, or semistarved patients in order to avoid severe hy glycemia which may require corrective therapy over sev days; and treating patients with severe trauma, infection, or gical procedures where temporary return to insulin or addi of insulin may be necessary. Response to tolbutamide is di ished in patients receiving therapy with beta blocking age

As some diabetics are not suitable candidates, it is essen that the physician familiarize himself with the indications, li of application, and selection of patients for therapy.

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an daily, and during the first month report at least once weekly r physical examination and definitive evaluation. After a month, aminations are recommended monthly or as indicated. Ap-arance of ketonuria, increase in glycosuria, unsatisfactory wering or persistent elevation of blood sugar, or failure to tain and hold clinical improvement indicate nonresponsive-ss to Orinase (tolbutamide). Orinase does not obviate need for aintaining standard diet regulation. Uncooperative patients ould be considered unsuitable for therapy. Prescriptions should refilled only on specific instruction of physician. In treating ld asymptomatic diabetic patients with abnormal glucose lerance, glucose tolerance tests should be obtained at three- six-month intervals. Orinase is not an oral insulin or a substi-te for insulin and must not be used as sole therapy in juvenile abetes or in diabetes complicated by acidosis or coma where sulin is indispensable.

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Adverse Reactions: Severe hypoglycemia, though uncommon, ay occur and may mimic acute neurologic disorders such as rebral thrombosis. Certain factors such as hepatic and renal sease, malnutrition, advanced age, alcohol ingestion, and drenal and pituitary insufficiency may predispose to hypogly-mia and certain drugs such as insulin, phenformin, sulfona-ides, oxyphenbutazone, salicylates, probenecid, monamine kidase inhibitors, phenylbutazone, bishydroxycoumarin, and henyramidol may prolong or enhance the action of Orinase and increase risk of hypoglycemia. Orinase long-term therapy has een reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

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UAB Dedicates New Lister Hill Library

Dedication of the newly completed Lister Hill Library of the Health Sciences was held at the Medical Center of the University of Alabama in Birmingham (UAB), Oct. 19. Dr. Martin M. Cummings, director of the National Library of Medicine, Bethesda, Md., delivered the main address.

The $1.7 million library is named for former Senator Lister Hill, America's foremost health statesman and leader of the nation's efforts to provide better health care for its citizens.

Sen. Hill, co-author of the Hill-Burton Act which initiated the concept of local-state-federal cost sharing of hospital facilities, also championed much legislation related to libraries during his 46 years in Congress. The legislation led to creation of the National Library of Medicine and construction and support of other health sciences libraries. Funds provided by these bills, combined with state monies, made possible the modern, three-story Medical Center library.

Sen. Hill also authored or co-authored numerous other bills which have provided funds for health facilities, medical research, health education, mental illness, retardation, preventive medicine, and aid to the handicapped. Many structures of the Medical Center were made possible through the Hill-Burton program.

Dr. Cummings was chief of the Office of International Research and associate director for research grants at the National Institutes of Health, before being named to his present post.

Dr. Harold M. M. Tovell, director of the Woman's Hospital division of St. Luke's Hospital, New York City, made a special presentation to the Medical Center of a set of stained glass windows which came from New York's original Woman's Hospital, founded by the late Dr. Marion Sims, a native of Alabama.

The new building, located at 1700 8th Avenue, So., will include 32,000 square feet of floor space, more than twice the amount the library occupied in its former location in the University Hospital complex. The space will consolidate the library's 105,000 volume collection, some of which was stored in warehouses on campus for lack of space. This additional room will also allow the library to expand its collection to approximately 220,000 volumes.

The library will house the combined collections of the medical, dental, nursing, allied health, and optometric schools, as well as related scientific

periodicals and literature, and Alabama historical materials owned by the University.

The building includes three conference rooms which can be used by health professionals in the community, and some 40 basement parking spaces. It was designed by Fred Renneker, Jr., and Associates, Inc., of Birmingham, and built by Daniel Construction Company of Alabama.

HEW Announces Medicare Fire Regulations

Medicare fire safety regulations, requiring hospitals and extended care facilities to comply with provisions of the Life Safety Code of the National Fire Protection Association have been announced by Elliot L. Richardson, Secretary of Health, Education, and Welfare.

The Life Safety Code sets specifications for institutional construction and fire safety protection measures and since it is also the standard established by law for nursing homes participating in the Medicaid program, this action sets a uniform standard for the Department.

Secretary Richardson said the applicability of the Life Safety Code to both programs will facilitate coordination of enforcement efforts and thus help carry out the president's directive to upgrade the quality of nursing home care provided our older citizens.

State agencies will continue to be responsible for inspection and implementation of fire safety standards under the new Medicare regulations, but will now apply the guidelines in the Life Safety Code rather than those previously listed in the regulations.

Comments received during the course of developing the Medicare regulations, Secretary Richardson said, questioned the adequacy of presently available methods for testing the flammability of floor coverings. Recognizing the need for additional research, the Department of Health, Education, and Welfare has entered into a contract with the National Bureau of Standards to evaluate the various carpet flammability tests. The Facilities Engineering and Construction Agency of the Department of Health, Education, and Welfare is coordinator of the project.

Until that study is completed, Secretary Richardson said, the floor covering requirements contained in the Life Safety Code will be applicable under the Medicare program. Under the Life Safety Code, the "tunnel test" is the standard flammability test if the fire authority having jurisdiction believes a floor covering may present an unusual fire hazard. This test is also the standard under the Hill-Burton program and is the standard in Army, Navy, and Veterans Administration hospitals.

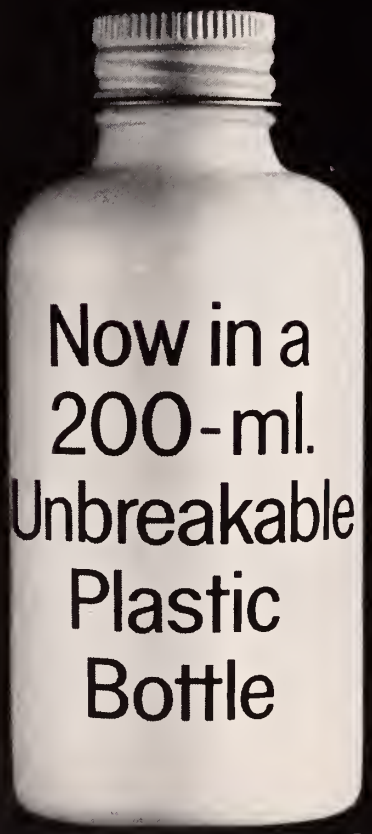
Under the test, a strip of carpeting 25 feet long is affixed to the ceiling of a tunnel that is about a foot high. The carpeting is ignited with a gas jet and the flame spread is measured over a given time.

The Life Safety Code also requires that facilities of wood frame and certain other types of construction be protected with a sprinkler system. Wood frame facilities without sprinkler systems may be certified to participate in the Medicare program only if they have equivalent provisions for the protection of patients. The individual state agencies will also be responsible for determining the adequacy of such provisions under guidelines to be issued by the Social Security Administration.



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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
January 1972, Vol. XIII, No. 1

ORIGINAL PAPERS

Direct Coronary Revascularization

CARLOS M. CHAVEZ, M.D., and
J. HAROLD CONN, M.D.
Jackson, Mississippi

The authors give a brief history of the surgical treatment of symptomatic coronary artery disease and show that direct coronary revascularization is the most rational approach at the present time. They explain how the procedure is done at the Veterans Administration and University Medical Centers, give two case histories, and also discuss their use of extracorporeal circulation, cardiac arrest, ventricular fibrillation, and cardiopulmonary bypass.

THE SURGICAL TREATMENT of symptomatic coronary artery disease has gone through a series of stages, from empirical and ineffective operations to more rational procedures such as the internal mammary implantation and the most recent direct myocardial revascularization techniques. The results with the latter have been so dramatic that its popularity has surpassed and overshadowed the implant operations. It will take several years to assess the long-term value of this procedure and place it in its proper category of therapy.

Since the original clinical application of saphenous vein grafts for bypass of the coronary arteries,[1] a considerable number of operations of this type have been performed. It is proper to mention here the original contributions of Favaloro[1, 2] and Johnson[3] in this respect. They can be credited with being the pioneers of the modern era of coronary surgery.

The essential factor in the development and acceptance of both the arterial implants and the direct revascularization procedures has been the introduction by Sones and associates[4] of the selective coronary arteriography. Recently more elaborated techniques and evaluation of the coronary patient, such as controlled pacing and metabolic studies[5] before and after the operation have been applied and a more accurate and scientific approach developed.[6]

Our initial efforts went along with the new developments in this field and our experience with the implants was similar to that of other groups. The results were indefinite and the benefits unpredictable. If it was true that there was a clear improvement in some patients, it took six to nine months for this effect to be clinically evident. This factor may have accounted for the rapid accept-

From the Departments of Surgery, Veterans Administration and University Medical Centers, Jackson, Miss.

ance of the direct approach with which an immediate benefit is obtained.

Operating on an ischemic heart requires a maximum protection for the myocardium. Any measure to obtain this will be reflected in the operative or immediate postoperative mortality. The use of extracorporeal circulation is one of these means and it is widely used for this purpose. The reduction of heart work by taking part of the load contributes to decrease the strain of the myocardium and prevent ischemic changes and hemodynamic problems at the time of surgery. Cardiac arrest by anoxia or local hypothermia and induced ventricular fibrillation are presently used in many centers to produce a quiet field to work on during the critical period of coronary anastomosis. Arterial anastomosis to the anterior descending branch and proximal two-thirds of the right coronary arteries can, however, be done safely with a relatively quiet field while the heart continues to beat at a slow rate and strength (effects of the total cardiopulmonary bypass).

TECHNIQUE

The surgical Intensive Care Unit nurses explain to the patients, the day before surgery, the procedures to be carried out after they come from the operating room. A tour through the Recovery and ICU areas is included in this briefing.



Figure 1. Case No. 1. Aortocoronary bypass with saphenous vein. Selective arteriogram showing patent graft with revascularization of the anterior descending branch. Note the retrograde filling of the host artery.

The operation is carried out under endotracheal general anesthesia. A central venous line and an arterial cannula, inserted percutaneously in the radial or brachial arteries, are used for continuous monitoring of venous and arterial pressures respectively. At the same time that a mid-sternotomy is performed, another team of surgeons removes a segment of saphenous vein to be used as a bypass graft.

The pericardium is widely opened and cannulation of the vena cavae is carried out after systemic anticoagulation with heparin at a dose of 3 mg. per kg. of body weight.

The femoral artery is then cannulated and connected to the arterial line of the pump oxygenator (disposable bubble oxygenator) primed with Dextrose in one-half normal saline. The venous cannulae are connected to the return venous line of the extracorporeal circuit and with the connections made, but with the pump off, preliminary dissection of the coronary vessels is carried out. If any pressure of rhythm disturbances occur, the pump is started immediately and, under partial bypass, the dissection of the area for the distal anastomosis in the coronary artery is completed. The vessel is isolated between silk ligatures, and with the patient under total cardiopulmonary bypass, the distal anastomosis of the vein graft is made in an end-to-side fashion to the coronary artery, using running sutures of 6-0 Polypropylene (Prolene). Once this anastomosis is completed, the patient is placed again in partial bypass or the bypass may be discontinued and the



Figure 2. Case No. 2. Selective coronary arteriogram. Preoperative study demonstrating a marked stenosis of the anterior descending branch and another area in one of the marginal branches.

proximal anastomosis of the vein graft to the ascending aorta is carried out, using a partial excluding clamp on the latter. The anastomosis is performed in similar fashion using running sutures of 5-0 Prolene. The cardiopulmonary bypass is then discontinued and the caval cannulae removed. The blood from the oxygenator is returned slowly to the patient through the femoral artery and the heparin neutralized milligram per milligram with Protamine sulfate. The following are examples of the uses of this technique.

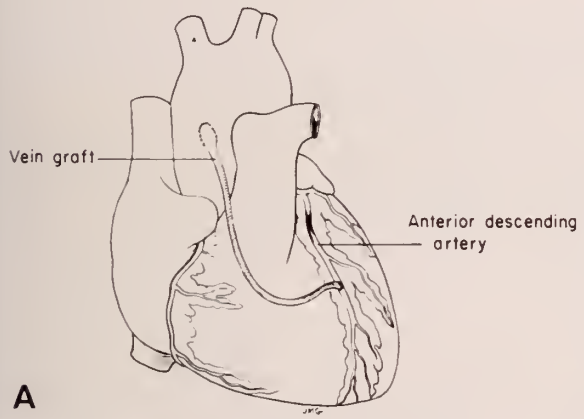


Figure 3. (a) Diagrammatic representation of the bypass procedure carried out in the patient of Case No. 2. (b) Postoperative arteriogram showing a patent graft with adequate revascularization of the anterior descending branch.

CASE REPORTS

Case No. 1: D. McK. This was the first Veterans Administration Center admission (June 3, 1970) for this 40-year-old man who was admitted with a history of a previous heart attack while he was in the military service in 1960. He was hospitalized for three months, and then received further treatment during the following several months. He did fairly well until November, 1969, when he experienced the onset of occasional chest pain, which was relieved by nitroglycerin. Since then, his chest pain had become more intense and frequent; at the beginning, it appeared only after moderate exercise, but for the last few months prior to this admission, he had as many as 12 to 15 attacks per day, becoming incapacitating.

The physical examination revealed a well-nourished man with no abnormalities. His blood pressure was 140/90, with a pulse rate of 78 per minute. The routine laboratory studies were within normal limits, except for an elevated cholesterol. A serum lipoprotein electrophoresis reported triglycerides of 365 mg. per cent and cholesterol, 348. He was considered type IV hyperlipidemia. Electrocardiograms revealed an old anterior myocardial infarction. On June 10, 1970, he underwent coronary arteriograms and heart catheterization which revealed a complete occlusion of the right coronary artery peripherally, and complete occlusion of the left anterior descending with collateral distal filling from the right coronary artery. Several areas of mild stenosis were visualized in the left circumflex branch. The end-diastolic pressure in the left ventricle was 15 mm. of mercury. On fluoroscopy, the ventriculogram revealed an akinetic area at the apex of the left ventricle. There was no evidence of aneurysm formation.

On July 6, 1970, the patient underwent a saphenous vein bypass graft from the ascending aorta to the distal anterior descending branch of the left coronary artery, under cardiopulmonary bypass. He tolerated the procedure well, and had an uneventful postoperative course. He was discharged from the hospital on July 18, 1970. He returned on Aug. 31, 1970, for selective arteriograms which showed a patent saphenous vein bypass graft (see Figure 1). The patient has done



Figure 3b

remarkably well and the chest pain has considerably decreased in intensity and frequency to the point that he requires only an occasional nitroglycerin to relieve the chest pain. On Feb. 10, 1971, he was readmitted for a treatment of fistula in ano, for which he underwent surgery without complications. He was discharged in satisfactory condition, and at the present, on April 21, 1971, he is doing well and reassuming his normal occupation.

Case No. 2: J. P. D., a 51-year-old white male, was admitted to the Veterans Administration Center with the chief complaint of angina pec-

toris. The patient reported that he had been in good health until approximately two years prior to the present admission, at which time he suffered an "acute myocardial infarction" and over the succeeding weeks developed angina pectoris which became more severe over the next year. Less than a year ago, he underwent coronary arteriograms elsewhere and these showed a considerable obstructive lesion in the left anterior descending branch. During that admission, the patient also had a positive exercise test with two 3 mm. ST-T deflection on exercise at a pulse rate of 160. He was admitted to this hospital and repeated coronary arteriograms and ventriculograms revealed two critical obstructions (90 per cent) located in the anterior descending artery and diagonal branch (see Figure 2). The end-diastolic pressure was 11 mm. Hg.

On Nov. 23, 1970, an aortocoronary (left anterior descending) saphenous vein bypass was performed under total cardiopulmonary bypass (see Figure 3a). The postoperative course was uncomplicated and the patient was discharged from the hospital on the fifteenth postoperative day with no chest pain. He was readmitted on Jan. 4, 1971, for postoperative evaluation and coronary angiograms. These studies revealed a patent saphenous vein graft and no chest pain during the exercise test (see Figure 3b). At this time, he was not having chest pain and performed moderated activity. He was seen again in March of 1971, at which time the patient was doing satisfactorily.

DISCUSSION

It has been recognized that the presence of a lesion localized to just one vessel is not frequently found and involvement of both coronaries or their branches is a common occurrence. However, some lesions may occur in the terminal branches of one of these vessels, making a repair not feasible or practical. At any rate, if more than one major branch is involved, which is amenable to bypass, this should be performed in the form of multiple grafts in order to supply additional and needed blood flow to the compromised myocardium. Repair of as many lesions as feasible is, consequently, necessary and extremely helpful in not only the total rehabilitation of the patient, but also to prevent postoperative problems derived from remaining ischemic areas. Illustrative examples of the most common types of aortocoronary bypasses is depicted in Figure 4. It is for those cases which will require bypasses to distal right coronary or circumflex branches that some form of arrest or fibrillation with left heart decompression is necessary to allow displacement of the heart in order to gain access to these areas.

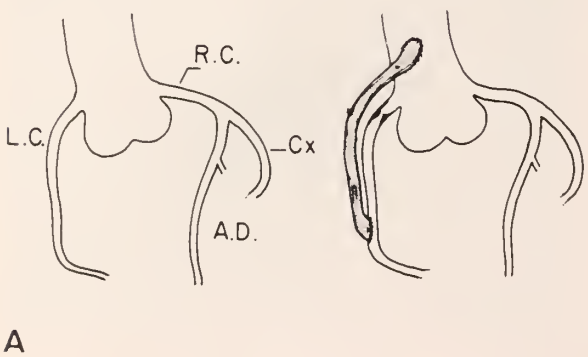


Figure 4. Diagrammatic representation of the most common types of aortocoronary bypass procedures. Multiple grafts are used whenever more than one artery or major branch is compromised.

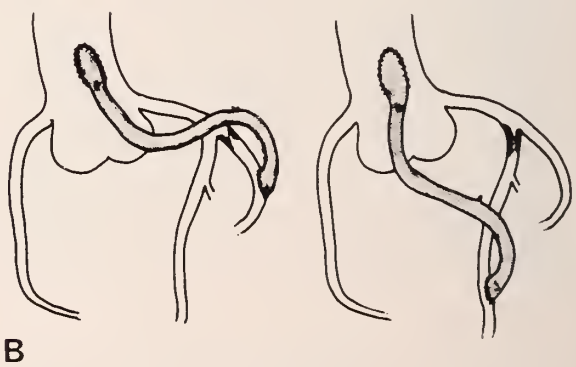


Figure 4b

The location of the proximal part of the right coronary and most of the anterior descending branch makes these vessels readily accessible and a bypass graft operation is feasible without the use of cardiac arrest or fibrillation.

Some of the important factors for the success of a bypass procedure in the coronary arteries are an adequate extracorporeal perfusion, satisfactory anastomosis and postoperative care with careful balance of blood volume, hematocrit and electrolytes; and nursing care is considered of utmost importance. Preoperative hemodynamic or clinical evidence of heart failure is no longer a contraindication for myocardial revascularization, if enough cardiac muscle reserve is present to respond to improvement in coronary blood flow. Excision of ventricular aneurysms is carried out also if present at the time of coronary bypass. This additional surgical step will contribute to im-


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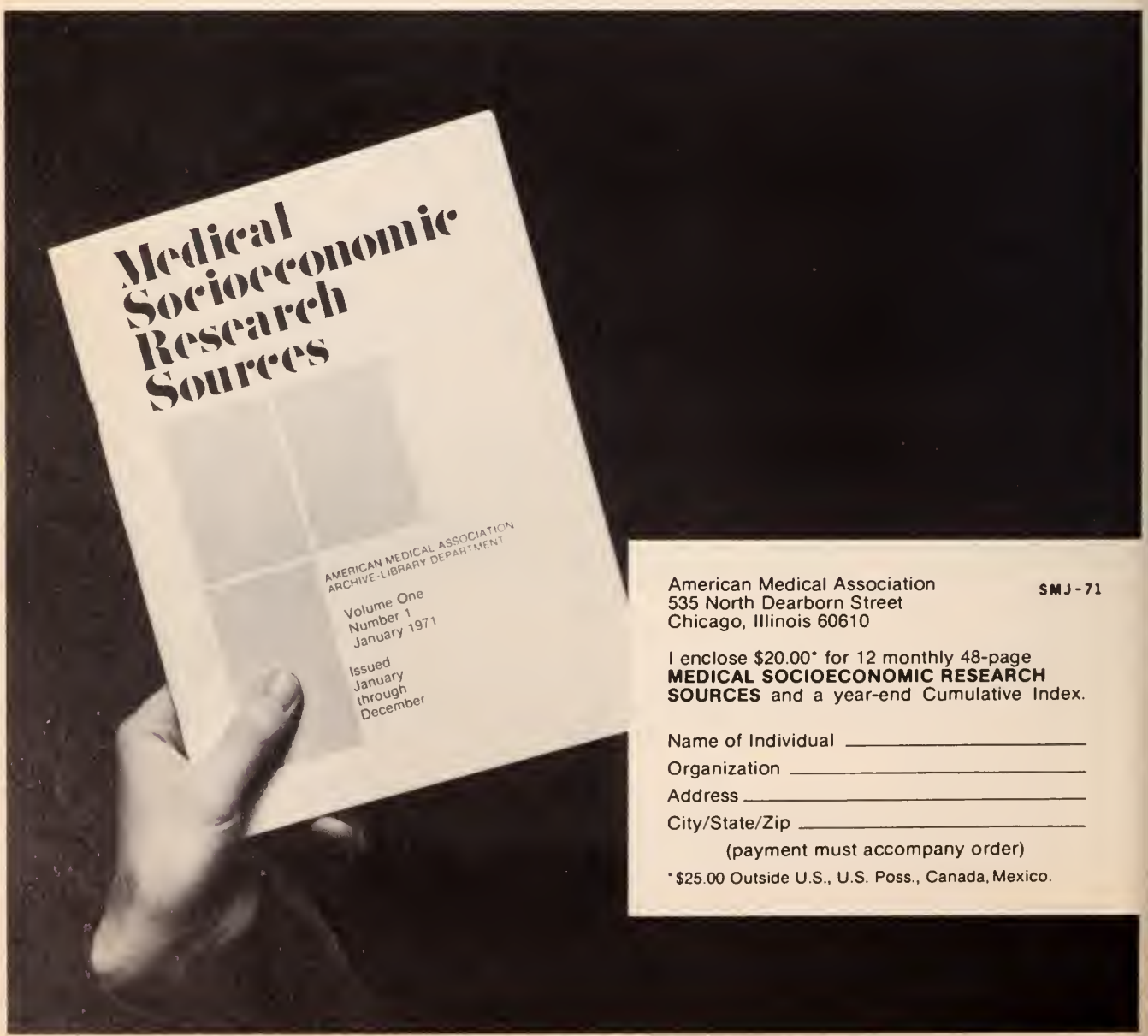
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prove cardiac function by eliminating a contractile area of the ventricle.

The initial indication for coronary artery bypass, "intractable" angina has been considerably



C

Figure 4c

expanded to (a) "critical" lesions located in the left main coronary artery or other critical areas even with moderate angina; (b) angiographic evidence of 90 per cent occlusion of one or more coronaries with enough symptoms to warrant a coronary angiogram; (c) patients with significant angiographic lesions in the coronaries, amenable to bypass, with or without angina but with clinical evidence of heart failure. The benefit of myocardial revascularization in acute infarctions is still controversial and under evaluation, but more and more efforts are being made to operate on these patients if and when it occurs in a coronary unit or during a coronary angiogram. Many surgeons now favor immediate operation under these circumstances.

The mortality rate of surgery for coronary disease is steadily decreasing and is reported from 4 to 15 per cent in most institutions. Selection of patients for this type of surgery is a major factor in determining the statistical analysis of the morbidity and mortality rate. For selected good risk cases, the latter becomes considerably low. On the other hand, undertaking poor risk patients with limited functional reserve but with surgically correctable lesions will increase the mortality rate. This, however, is an acceptable risk, considering that this group of patients has little or no hope regardless of the type of medical treatment employed.

SUMMARY

Direct coronary revascularization, using the bypass vein graft techniques, is the most rational approach for the treatment of coronary occlusive disease at the present time. The results so far are rather impressive and the mortality rate is steadily decreasing as more experience in technique and better selection of patients is gained.

Extracorporeal circulation is an essential part of the operative procedure, allowing a wide margin of safety during the operation. Cardiac arrest or fibrillation is a helpful maneuver to retain a quiet field and adequate access to distal branches of the coronary vessels. Proximal lesions of the right coronary and anterior descending branch, however, can be bypassed with the use of extracorporeal circulation without cardiac arrest or fibrillation. ★★★

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The authors wish to thank Dr. James D. Hardy for his encouragement and support.

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ADVANCING THE RUNNER

Progress always involves risks. You can't steal second base and keep one foot on first.

A New Horizon in Cancer Therapy: Immunotherapy

R. B. THOMPSON, M.D.
Jackson, Mississippi

PART I

UNTIL RECENTLY, only three approaches existed for the treatment of a patient with cancer: (a) surgery, (b) radiotherapy, and (c) chemotherapy, either alone or in various combinations depending on the malignancy to be treated. Approximately two-thirds of patients were incurable with these weapons. Thus other approaches were sought with the main emphasis being on the body's own immunological mechanisms. With the demonstration that cancer cells carry different antigens known as tumor associated antigens (TAA) specific in the cases of chemically or viral induced tumors, evidence was produced that perhaps this might be the proper avenue of approach.

We intend to deal primarily with the evidence existing in the clinical field to aid the practitioner in the knowledge of treatment and following of the patients who, in the future, may be of one or more protocols involving immunotherapy.

Three types of immunotherapy exist: (a) passive, (b) active, and (c) adoptive.

Passive immunotherapy may be defined as the administration of antibodies non-specific if directed against all the cellular antigens (TAA and normal), and specific if directed only against TAA antigens.

One of the early clinical trials[1] employed the use of the IgG fraction of horse anti-human lymphocyte serum in patients with chronic lymphatic leukemia. Of 12 patients treated, four demonstrated a temporary fall in the circulating lymphocyte count, which returned to normal when the administration of the serum was stopped. A serious stumbling block was the possibility of enhancing tumor growth by the administration of blocking antibodies along with the cytotoxic antibodies as suggested by Mathé et al,[2] and Amiel et al.[3] They observed a striking correlation in patients with choriocarcinoma between the prognosis of the disease, tolerance of a skin graft from the patient's husband and presence of agglutinating serum antibodies.

This paper was done while the author, then an associate professor of clinical laboratory sciences at the University of Mississippi Medical Center, was on sabbatical leave as Master of Research, l'Institut de Cancérologie et d'Immunogénétique, Villejuif, France. Under the premise that a malignancy is the result of an immunological deficiency, his studies involved enhancing the body's own immune mechanisms by immunotherapy. He defines and explains immunotherapy and discusses work done in that field in this two-part article.

Another trial[1] employed autotransfusions of plasma and leukocytes obtained from patients with acute leukemia during an earlier remission resulting in a considerable prolongation of the remission periods. This work was based on the premise that patients during the remission phases of acute leukemia become immunologically tolerant to their own leukemogenic agent.

Active immunotherapy may be defined as the stimulation of the patient's own immune system either nonspecifically by the use of adjuvants

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Bacillus Calmette Guérin (B.C.G.), corynebacterium parvum (C.P.) etc., or specifically with tumor specific antigens (irradiated tumor cells or inactivated carcinogenic viruses). Considerable experimental work has been done on the enhancement of the immune mechanism prior to the tumor development with little emphasis on inhibition of tumor growth after establishment. It is this latter aspect which is of primary concern to us in therapy, although statistical evidence has recently been presented[5] that leukemia is half as common in children immunized with B.C.G. as among nonvaccinated individuals.

Many questions need to be answered before starting a regime of active immunotherapy. Should treatment be restricted to those tumors reduced to a small number of cells or is one justified in treating patients with large surgically nonresectable tumors? The answers are not yet clear but spontaneous remissions have been reported, especially in patients possessing tumors for which immune reactions have been demonstrated (neuroblastomas,[6] melanomas[7]). There are reports in the literature of tumor regressions occurring after spontaneous or induced infections.

Irradiated tumor cells either from culture or biopsy have been used to treat patients suffering from various cancers.[9, 10] Slight to moderate regressions have been observed in 11 out of 116 patients treated.

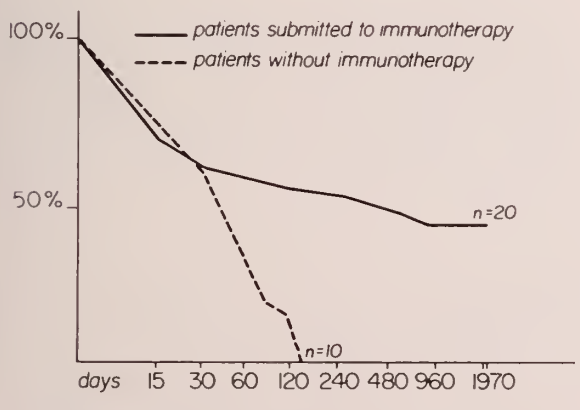


Figure 1. The actuarial curves of patients with acute lymphoblastic leukemia treated by protocol No. 1 demonstrating the duration of complete remissions after cessation of chemotherapy.

In an attempt to make tumor cells more antigenic, Czajkowski et al[11] coupled tumor cells to a highly antigenic foreign protein (bis-diazobenzidine) and injected the complex back into the cancer patient. On 14 patients, all tumors showed evidence of necrosis; two completely regressed and three had a stabilization in tumor growth (5/14 or 33 per cent). The best results were obtained by Williams and Klein[12] employing a type of indirect active immunotherapy from local delayed hypersensitivity reactions to two chemical agents: 2,3,5-triethylene-imino-benzoquinone (TEIB) and dinitrochlorobenzene (DNCB). Over a period of five years, 2,000 lesions in over 50 patients were treated with 90 per cent regression of superficial lesions but only a 40 per cent regression of recurrent lesions.

MATHÉ'S WORK

However, perhaps the best trial was carried out by Mathé and associates on the residual disease left in acute lymphoblastic leukemia after chemotherapy designed to reduce the tumor volume to a minimum. Many have argued that this disease was an unwise choice for such a trial with active immunotherapy, because of a "supposed" immune tolerance. However, as Mathé has pointed out, the choice was selected for the following reasons: (a) lack of proof of immune tolerance; (b) demonstration of antibodies against leukemia cells;[13] (c) a possible break of tolerance, if such existed by chemotherapy; and (d) an ability to roughly estimate the number of residual or remaining tumor cells after sequential chemotherapy. We feel that a discussion of Mathé's results since 1964 are in order as these results answer much of the controversy. The trials have been broken down into eight protocols. It is our purpose to present some of these results.

In his first trial (1964) 30 patients from 3-50 years were treated with sequential chemotherapy after induction of remission (one drug at a time) combined with intrathecal methotrexate and meningeal irradiation. Following chemotherapy, the patients were randomized into four groups: Group I receiving only chemotherapy (controls); Group II receiving chemotherapy followed by active immunotherapy employing B.C.G. by cutaneous scarification initially every fourth day and then every eighth day; Group III receiving chemotherapy followed by active immunotherapy employing subcutaneous and intradermal injections of pooled leukemic cells, and Group IV receiving both B.C.G. and injections of leukemic cells after chemotherapy. The results of this first trial published by Mathé[14] demonstrate a significant and striking difference between the control group (I) and those treated by immunotherapy. All 10 of the control group relapsed between 30-130 days after cessation of chemotherapy, while seven (30 per cent) of patients receiving active immunotherapy are free of disease and in good health three to five years after cessation of chemothera-

py. Most of the relapses in patients receiving immunotherapy occurred early, suggesting that a greater number of tumor cells was left after cessation of chemotherapy than could be controlled by active immunotherapy. The actuarial curves of the two groups is shown in Figure 1.

A second protocol omitted meningeal irradiation. The results were discouraging due to the meningeal relapse. In a third protocol, chemotherapeutic drugs were given two at a time in four sequences; the last sequence included intrathecal chemotherapy with drugs followed by irradiation to the meninges at the end of the sequence. A splenectomy was carried out in all patients with splenomegaly. Any enlarged nodes demonstrable early in the course of the disease were also irradiated. At the end of this therapy, the patients were randomized into three groups: (a) those receiving B.C.G., corynebacterium parvum and leukemic cells; (b) those receiving in addition to (a) monthly injections of vincristine; and (c) the same as (a) plus continuous treatment with amantadine, an antiviral agent.

By the 500th day, it was apparent that active immunotherapy given alone after sequential chemotherapy was superior to that with vincristine or amantadine. The latter two are immunosuppressive agents and inhibit the effect of active immunotherapy.

One should also add a brief note on the other agents employed immunotherapeutically. Corynebacterium parvum (C.P.) has been demonstrated to raise the antibody titer in man against poliovirus while irradiated leukemic cell injections in patients with acute myeloid leukemia increase the percentage of lymphocytes transformed in vitro by autologous leukemic cells.

A later and present protocol (see Figure 2) has added a new adjuvant, poly I.C. as it was shown to be a good immunological adjuvant and effective on acute leukemic patients in a visible phase of their disease if less than 20 per cent leukemic cells existed in the marrow.

OTHER INVESTIGATORS

Other investigators, encouraged by Mathé's results have started immunotherapeutic trials both in leukemia and solid tumors. Guyer and Crowther[15] employed Bordetella pertussis vaccine to patients with acute lymphoblastic leukemia in remissions with slight prolongation of the remission. Sokal et al[16] has treated six patients with chronic myelogenous leukemia in good chemotherapeutic control with B.C.G. mixed with actively growing cultured cells from a case of acute myelogenous leukemia with regression of splenomegaly and prolonged survival (40 months after first vaccination) although requiring additional chemotherapy. Of the control group (11 patients) receiving only chemotherapy, only two lived as long as 48 months after diagnosis.

Recently Hamilton Fairley[17] reported on a trial conducted by the Medical Council in Great Britain involving intensive chemotherapy without CNS treatment in patients with acute lymphoblastic leukemia followed by randomization into three groups receiving (a) no further treatment, (b) twice weekly methotrexate, and (c) immunotherapy with B.C.G. applied by health injection gun and of a different source than that employed by Mathé. The preliminary results show little differ-

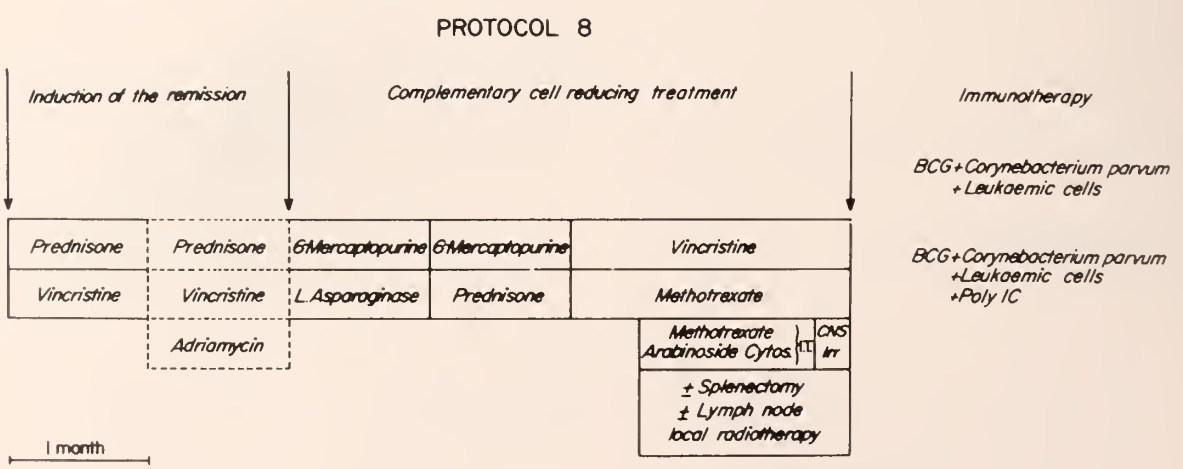


Figure 2. The actuarial curves of patients with acute lymphoblastic leukemia treated by protocol No. 8 demonstrating the duration of complete remissions after cessation of chemotherapy.



Figure 3. Appearance of a reaction to B.C.G.

ence between B.C.G. treated patients and those receiving chemotherapy.

Skwikovitch et al[18] actively immunized patients with acute leukemia in an acute phase with live allogeneic leukemic cells with or without chemotherapy. In both cases, remissions were induced and were of longer duration than in non-immunized cases.

B.C.G. has been used by Eiber et al[19] to treat cutaneous melanotic nodules by direct intradermal injection into the nodules with complete regression of the nodules as well as non-injected nodules. The same findings were obtained by Thompson.[20]

Hadziev et al[21] injected B.C.G. intradermally to obtain a systemic effect in 71 patients with bronchogenic carcinoma with a significant prolongation in the survival time (9-23 months as compared to six months in the controls). A 9-25 per cent result was obtained by this group employing the same therapy in regression of skin cancers.

Bluming et al[22] employed B.C.G. in patients with melanoma both by the scarification technique of Mathé (see Figure 3) and intradermal injection with the conclusion that the scarification technique is superior.

We thus conclude the initial discussion of passive and active immunotherapy. The second article (part II) will deal with adoptive immunotherapy plus our views on the future of immunotherapy in cancer therapy. ★★★

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PART II

In part I, we dealt with the clinical experience and support for two of the three variants of immunotherapy (active and passive). A third variant known as adoptive immunotherapy also exists. This may be defined as the transfer via transfusion, injection or grafting of the cellular or subcellular machinery responsible for the immune reaction. In the patient with neoplasia, this involves the contact of immuno-competent cells against the neoplastic cells with their consequent destruction. As one is dealing with cell mediated immunity, the lymphocyte or stem cell is the one of primary concern.

Thus adoptive immunity may be *non-specific* (employing non-immunized or non-conditioned lymphocytes) with the reaction against both normal and tumor associated antigens on the neoplastic cells; or *specific* when the lymphocytes are immunized only against the tumor associated antigens. In addition, it may be of short term effect through use of lymphocytes by transfusion, or long term with the grafting of bone marrow stem cells.

Considerable experimental work has been done in animals by many investigators, but we must confine ourselves principally to work done in man to provide a framework for the clinical trials now in existence. In humans, only non-specific or semi-specific adoptive innumotherapy has been performed.

Following the complication of a successful allogeneic bone marrow transplant by the secondary syndrome,[1] it was shown that the pathogenetic mechanism involved a reaction (the lymphocytes) against host antigens.[2] Experimental evidence was then forthcoming to suggest that if the recipient had leukemia, the immune reaction between the grafted lymphocytes and the leukemic cells or against the leukemic virus might be of great value in therapy.[3, 4, 5, 6] The idea proposed and tried was to obtain acceptance of the graft, to produce a secondary syndrome indicating a graft-virus-host reaction involving the leukemic cells, and then to control the secondary syndrome. This latter entity may appear a few days after the transfusion and kill the host quickly (acute or hyperacute variety) or some weeks or months later and be either lethal or curable. Its severity is correlated with the number of lymphocytes transfused, the dose of irradiation, as well as the immune and/or microbiological condition of the recipient. This syndrome is composed of two components: (a) infiltration of many tissues (especially skin and liver) by proliferating lymphocytes and (b) a severe immunological insufficiency with loss of immunological memory.[7]

Between 1959-1968, Mathé and co-workers[8] gave 24 patients with acute leukemia allogeneic bone marrow grafts after total body irradiation. (See Figure 1) In 17 (70 per cent) the grafts were successful but in only five of these could the secondary disease be controlled, thus allowing the leukemic effect to be analyzed. In three of them, the graft was only transitory and produced a third of the blood cells; however, long remissions of between five to nine months were obtained. In a fourth patient, the graft was complete but the patient died 20 months later from herpes encephalitis, a complication of the immune insufficiency related to a latent secondary

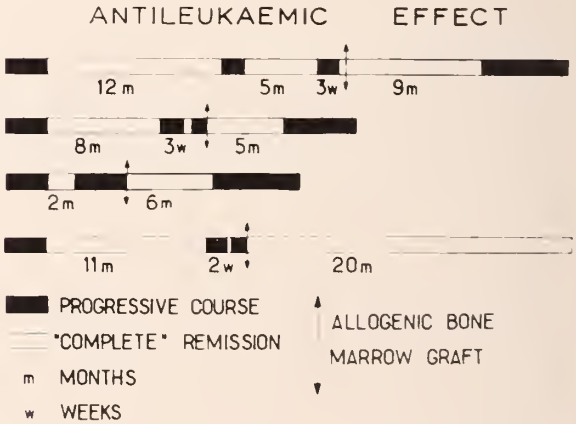


Figure 1. The active phases and remissions in four patients treated by allogeneic bone marrow grafts and who did not die of secondary syndrome.

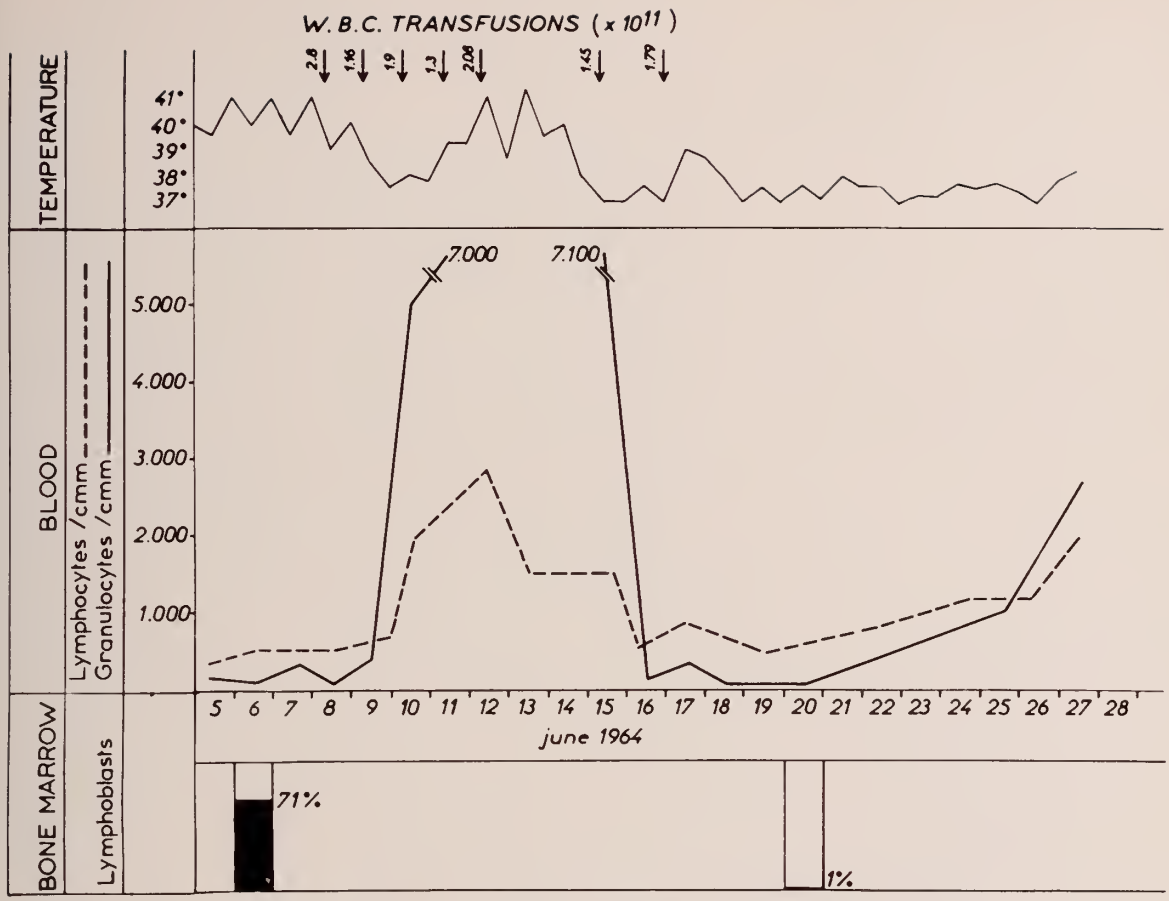


Figure 2. Induction of a remission in a patient with acute lymphoblastic leukemia by leukocyte transfusions from a normal donor.

syndrome. There was no histological evidence of leukemia on autopsy examination.

The powerful antileukemic effect provoked an intensive search for an agent other than total body irradiation which would not stimulate the production of the secondary syndrome. As pointed out by Mathé[9] the secondary syndrome was directly due to graft-virus-host reaction and not to irradiation. The degree of lymphoid aplasia induced by irradiation of the recipient seems to be the important factor, in that it provides space for proliferation of donor lymphocytes. Santos et al[10] used cyclophosphamide as a conditioning agent prior to grafting, but their results were similar to those obtained by total body irradiation. In an attempt to reduce the effects of the secondary syndrome, Mathé et al[11] employed antilymphocytic serum as the conditioning agent. This trial encompassed 20 patients, of whom only 16 could be adequately studied. Of these 16, six had acute myeloblastic leukemia, four acute lymphoblastic leukemia, one a blast crisis in polycythemia vera, one, thalassemia major and four others a bone marrow aplasia. Only seven patients demonstrated evidence of a successful graft without evidence of a secondary syndrome but no antileukemic effect. The next step was to combine ALS with cyclophosphamide; in nine patients treated, the incidence of successful grafts was high as was an antileukemic effect. However, two patients died of uncontrollable secondary disease.

Signs of secondary disease were observed by Schwarzenberg et al[12] after white cell transfusions in patients with agranulocytosis complicated by infection. Encouraged by the idea of obtaining a G-V-H in non-irradiated patients, 21 patients with acute leukemia were treated initially with leukocytes from patients with chronic myelogenous leukemia. G-V-H reactions were obtained only with a high number of leukocytes (1×10^{10}).[13, 14] Ten of these (47 per cent) had remissions, of which seven were complete, varying from 7 to 80 days (see Figure 2). The antileukemic effect correlated well with the clinical signs and symptoms of a G-V-H reaction (see Table 1).

Now, using an I.B.M. continuous flow blood cell separator, Schwarzenberg et al have been able to obtain up to 1.5×10^{10} lymphocytes from normal donors at one session. Using these cells, nine patients with acute leukemia, resistant to all forms of chemotherapy, have been treated with complete remissions of short duration. Thompson (unpublished data) employed normal leukocyte transfusions in two patients with acute myelogenous leukemia resistant to all forms of chemotherapy obtaining a long complete remission of nine months in one patient and an incomplete remission of three weeks in the second.

An early clinical trial of adoptive immunotherapy of solid tumors was conducted by Woodruff and Nolan[15] using allogeneic spleen cells injected either intraperitoneally or intravenously into eight patients with advanced malignancy after pretreating the patients with nitrogen mustard, phenylalanine mustard, thiotepa or prednisolone to delay cellular rejection. Changes either symptomatic, physical or histologic were observed in all cases suggesting an anti-tumor effect. However, lack of controls and randomization into three groups makes proper evaluation difficult.

ADOPTIVE IMMUNOTHERAPY

Semi-specific adoptive immunotherapy has been attempted by various investigators. In 1967 Mathé et al[16] treated 12 neoplastic pleural or peritoneal effusions with I.P. injections of previous immunized rabbit spleen cells (immunized by tumor cells previously obtained from the effusions). The febrile reactions occurred in all patients. Two effusions were decreased as the result of this treatment.

Later, Symes et al[17] employed intravenous allogeneic spleen cell suspensions after previously immunizing against the tumor to be treated in five patients with advanced malignancy. In one patient, cells from the mesenteric lymph nodes of an immunized pig were used. All patients eventually died of their disease but in three of the five, a regression of four to six weeks duration was obtained in tumor size. However, true assessment of therapy is difficult as the tumor treated, a melanoma, during its progression shows a course which tends to be episodic with regressions. Then again, no control group was available for comparison.

Andrews et al[18] treated two patients with melanoma, one with non-sensitized thoracic duct lymphocytes; the second with sensitized lymphocytes. No result was observed in the first case while the second died of a fatal G-V-H reaction. Two additional terminal acute leukemic patients were similarly treated but with no response.

TABLE I

IMMUNOTHERAPEUTIC EFFECT OF LEUCOCYTE TRANSFUSIONS. RELATION BETWEEN THE ANTILEUKAEMIC ACTION AND EXISTENCE OF A SECONDARY DISEASE

	Complete Remissions	*Incomplete Remissions*	*No Effect*
Secondary syndrome present	4	3	1
Absence of signs of secondary syndrome	1	2	11

An extensive study of pairing patients with similar malignancies, sensitizing each partner to the other's tumor by subcutaneous injection of tumor cells and then carrying out daily homotransplantation of white blood cell exchanges, 5-15 days after tumor implantation is being carried out by Moore et al.[19, 20] Of 200 patients so paired only 15 per cent who completed therapy and survived one month have shown an objective regression. Six patients have been reported to have shown a complete regression and three are free of disease at this time. In addition, 10 patients have been studied by infusions of autochthonous cultured lymphocytes with regressions in two.

With the demonstration[21] that delayed hypersensitivity could be transferred by the circulating thymus-dependent small lymphocytes, and later that extracts of lymphocytes transferred that same "immunologic memory," Alexander[22] employed an extract containing both DNA and RNA to experimental tumors in rats with regression in the doubling time of the tumor. However, he later abandoned these experiments as he felt that there was little advantage over irradiated sensitized cell extracts.

Thompson et al[23, 24] employed an extract from WBC in over 40 patients, 19 with extensive metastatic disease and 21 with what was called minimal to no visible remaining neoplastic disease. This trial is difficult to evaluate as there was no control group and no unbiased randomization of patients into the groups. Also as Bluming pointed out (personal communication), immunological criteria must be measured before and periodically during the therapeutic trials. Some regression, both objective and subjective, was observed in 12 patients but again in terminal melanoma patients, cyclic variation in tumors may occur spontaneously. There is need for a carefully controlled randomized study to support whether or not lympho-



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1. *Demeulenaere, L.: Action du R 1132 sur le transit gastro-intestinal, Acta gastroent. Belg. 21:674-680 (Sept.-Oct.) 1958.*

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cytic extracts are of value in therapy. Present experimental trials in mice would suggest that enhancement rather than regression is likely to occur.

These are the preliminary results of immunotherapy in man. Very few investigators have been willing to give it a fair trial as they have claimed that chemotherapy is the only answer as in infectious disease. However, we owe much to Mathé and others for their work in this field. It is fair to say that immunotherapy has a dual role to play, both preventive and curative. Preventive immunotherapy consists of avoiding treatments employing drugs which reduce the immunological defense mechanisms, i.e. steroids, or cyclophosphamide. Curative immunotherapy is the stimulation of the body's own immune defenses or the transfer of immuno-competent cells or antibodies. In order to assess adequately the role that immunotherapy is to play in cancer therapy, we must be willing to take risks and to evaluate critically all data which becomes available. ★★★

440 E. Woodrow Wilson Drive (39216)
and
Hinds Professional Bldg. (39204)

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Radiologic Seminar CXIII: Empty Sella Turcica

W. L. RONE, M.D.
Jackson, Mississippi

AN INTERESTING and important entity, which is sometimes found in an enlarged sella, is one wherein the sella contains no abnormal mass whatsoever. Found within the sella will be only cerebrospinal fluid contained in an intrasellar cistern along with the pituitary gland, which may appear compressed. The etiology of the enlarged sella which contains no abnormal mass has not been determined. It has been speculated that the pituitary gland enlarges during pregnancy or during active growth causing the sella to enlarge and subsequently the pituitary gland regresses in size. In a series of 25 cases of "empty sellas," containing an intrasellar cistern, reported and reviewed by Zatz, Janon, and Newton, 72 per cent were in women.[1] In most of the patients, pituitary dysfunction was not suspected clinically and laboratory tests were generally normal. The patients reported with empty sella had essentially no signs of pituitary hypofunction. Of course, none had been operated upon or irradiated. One series reported eight patients with empty sellas, three of whom had acromegaly.[3]

An enlarged sella turcica may be caused by various disease processes, frequently a pituitary tumor. Common etiologies of sellar enlargement include pituitary adenomas, suprasellar tumors, intracaverous aneurysms of the carotid artery, and dilated anterior third ventricle secondary to hydrocephalus.

Enlargement of the sella turcica as seen on plain skull x-rays should always be considered an important finding. Even though there is a wide



Figure 1. Brow up lateral tomogram of pneumoencephalogram showing air filled sella. Note also air in the anterior third ventricle and frontal horns of the lateral ventricles.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Hinds General Hospital, Jackson, Miss.

range of normal in the size of the sella, enlargement can usually be determined with reasonable certainty. The AP diameter and depth of the sella are considered enlarged when they are greater



Figure 2. Brow up AP tomogram of pneumoencephalogram showing air filled sella. Note ballooned floor of sella.

than 17 × 14 mm, or have a square area on the lateral view of greater than 130 square mm. The size is probably more accurately evaluated if the volume of the sella is determined, and is considered abnormal if the volume exceeds 1092 cubic mm. (Di Chiro and Nelson, 1961.) The enlarged sella associated with intrasellar cistern is usually a balloon type and cannot be distinguished radiographically, on plain films, from enlargement secondary to pituitary adenoma.

It is speculated by Zatz, et al, and Kaufman, that a congenital deficiency of the diaphragma sellae may be an important prerequisite for the formation of an intrasellar cistern. From a series of 788 autopsies (Bush) the diaphragma sellae was a complete membrane in only 41.5 per cent. In five per cent of the series the sella, which was usually enlarged, was filled by an extension of the subarachnoid space, and the pituitary gland was flattened against the posterior inferior wall of the sella. Of this group of enlarged sella containing intrasellar cisterns, 85 per cent were in women. An intrasellar cistern may also be present in sellae of normal size and shape.

The empty sella can be demonstrated only with a pneumoencephalogram and laminograms of the air filled sella, in both AP and lateral projections, preferably. The laminograms are necessary to be certain that the air is actually within the sella rather than in the lateral parasellar cisterns. At pneumoencephalography it should be apparent that the air empties into the intrasellar system from the subarachnoid space rather than from the anterior third ventricle. Air will enter the sella with the head extended in the sitting position or in the brow up position.

Whenever an enlarged sella is found on skull x-rays, consideration should be given to the possible diagnosis of an empty sella. This is particularly true if the patient has no symptoms of hypopituitarism or visual field loss, or if the patient is acromegalic. ★★★

Hinds General Hospital (39204)

X-rays are from the Mallinckrodt Institute of Radiology, St. Louis, Missouri.

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JUST PLAIN FOLKS

They're planning a new TV soap opera this fall. The plot centers around an unfaithful wife, a drug addict, a student anarchist planning on bombing a university, a child molester and a corrupt public official. It'll be called "Just Plain Folks."



The President Speaking

'We Accept, Mr. President'

ARTHUR E. BROWN, M.D.
Columbus, Mississippi

CENTRAL MEDICAL SOCIETY recently adopted a resolution to declare a moratorium for 60 days on the use of amphetamines except in cases of narcolepsy, hyperkinesis and certain psychiatric disorders. The moratorium would specifically exclude the use of amphetamines for weight control and as pep pills. A letter with the resolution was sent to me asking that your officers and Board of Trustees consider taking a public stand on the matter.

At the AMA meeting in Atlantic City last June, President Nixon delivered an address to the House of Delegates and officers of the state medical association. He stated that the problem of drug abuse used to be considered a ghetto problem or a problem of the poor and depressed. But today it has moved from the ghetto to the suburbs, from the poor to the middle class and then to the upper class. It affects the rich and the poor, the black and the white, the servicemen and the civilians. As an indication of its importance, President Nixon devoted almost 40 per cent of his speech to the drug problem.

Recently I heard a program on drug abuse. Two of the speakers were 19 years old and they had been on drugs since they were 14 years of age. One of them stated that he started by taking one of his mother's weight-reducing pills from the medicine closet. The amphetamine gave him a lift which he liked, and he was on his way to a life of degradation. Hopefully, now he may be on his way back and is trying to prevent others from making the same mistake.

President Nixon has issued a challenge to physicians to marshal our leadership in an all-out battle against drug abuse. We cannot ignore this challenge. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

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EDITORIALS

The Percentage Numbers Game; A Travesty Upon Medical Dignity

I

PHASE II of President Nixon's tough and far-reaching fight against inflation is a hard, statutory reality. Scarcely six weeks old, its implementation has been just short of phenomenal, and there are about as many opinions and appraisals of it as there are social and economic groups touched by the drastic—even traumatic—program. Not since the late President Franklin D. Roosevelt closed the banks in 1933 has there been any White House action to compare to the full spectrum economic program of the present administration.

Absolutely nobody could claim surprise when health care services were singled out for special consideration under Phase II, because any segment of the economy accounting for 7 per cent of a $1 trillion Gross National Product is bound to get the attention of the government's front office. Nor are other significant sectors of the economy neglected, despite their being catalogued in a catchall corral of control under the Price Commission and Pay Board.

An invisible bureaucracy overseeing Phase II is growing in strength and size. The big industries are being directly monitored, even to the extent of mandatory *ante facto* review of pricing practices and upward revisions. Organized labor, although divided within its own house, generally is unhappy with restrictions on bigger pay contracts, and they, too, are under the critical eye of the enforcement mechanisms.

A single sentence in the Phase II price regulations declares that professional services are within the 2.5 per cent maximum permitted increase range, although the new Health Services Industry Committee can moderate what could otherwise be an inflexible limitation. But behind the scenes in American medicine, there are profound differences of opinion on the economic side of physicians' services. It is regrettable that few have heard the first of this hassle, and absolutely none of us has heard the last.

II

In 1970, the Congress passed the Economic Stabilization Act, mostly directed at the incredibly complex problems of foreign trade, increasingly unfavorable balance of payments, and the tricky, little understood international currency market. The economic freeze authorities in the Act were actually opposed by the Nixon administration which, at the time, apparently had little inclination toward nor appetite for domestic economic controls. But near-runaway inflation and the upward price spiral changed a few minds, including an important one at 1600 Pennsylvania Ave. in our nation's capital.

The freeze authorities permitted the President to appoint the Cost of Living Council headed by Treasury Secretary Connally. The council's two principal policy-making bodies are the Price Commission and Pay Board. The Health Services

Industry Committee, interestingly enough, reports directly to the top, meaning the Cost of Living Council. The 21-member body includes four physicians and is headed by Mrs. Barbara Dunn, commissioner of the Connecticut Department of Consumer Protection. Dr. William E. Lotterhos of Jackson was one of President Nixon's appointees representing medicine.

The economic fireworks display began in late November when the committee, meeting two days each week, tackled the task of deciding what to do about hospital costs and physicians' fees. The former were pegged at 6 per cent per year, a substantial reduction from past annual growth rates of as much as 16 per cent. Physicians' fees were something else.

Studies by the Michigan State Medical Society showed that from 1966 to 1970, private practice revenues increased 33 per cent while practice expenses zoomed by 40 per cent (See "The Phenomenon of the Medical Care Dollar," J.M.S.M.A. XII:649 (Dec.) 1971). Forty-seven per cent of the price hike was attributed to general rising prices. Seventeen per cent related directly to population growth, the simple fact that there are more Americans around to consume medical services. And the remaining 36 per cent related to increased utilization of professional services.

Now this is not to say that physicians' fees have not been increased, as the increased four-year mean private practice revenue volume suggests. But most of the greater fee income resulted from something other than the doctor raising the fee for a given service. This, then, is the complex background against which the committee should have cast its deliberations. Actually, there is nothing on the record to suggest that this degree of careful consideration was applied.

III

The committee came up with the 2.5 per cent increase factor which also goes for shoes, tires, and industrial and consumer products. In the highest circles of American medicine, the thinking was shaped around the Pay Board's maximum of 5.5 per cent applied to wages and salaries. But there was a far more realistic and rational viewpoint to which Dr. Lotterhos subscribed.

In the first instance, the literal definition of a *price* doesn't fit compensation for professional services. Economists are not expected to be semanticists, but casting the private practitioner in the role of a salaried individual or wage earner is patently erroneous. A *price* is an exchange rate or a cost level. *Salary* means payment for preagreed services on a periodic basis. *Wage* implies earnings for less skilled work, often hourly or weekly.

By contrast, a *fee* is compensation paid once for a one-time professional service, never a salary or a wage. All a small point, maybe, but the authority is no less than Dr. Sam Hayakawa, the semanticist who probably has no peer.

A second point is the percentage angle. Professional individuals, be they physicians, attorneys, architects, or others among the learned groups, do not generally make charges for their services in pennies and fractions. Nor do they adjust their fees upward or downward by pennies. The 2.5 per cent, in this context, borders on the absurd for it means just this: Shall a pathologist increase the charge for a laboratory procedure to $3.075 from his present $3? Or shall a surgical procedure, under the 5.5 adjustment gradient, be raised to $105.50 from $100?

Application of the percentage is demeaning to professional individuals, just as it is impractical to administer. Since most medical care financing mechanisms already have built in maximums, the costs of administration of fractional increases



"It's me! . . . Live and in person!"

would be more than the revised fee. But the greatest consideration is the precedent of the percentage, reducing the professional compensation picture to little more than a nickel and dime proposition.

And finally, professional individuals should not be painted into an economic corner by such dangerous precedents. When any profession agrees to a fractional fixed amount, then a guideline has been set from which that profession is not likely to be permitted to depart.

So it is all a matter of definition, dignity consistent with the professional calling, practicality of administration, and the setting of precedents unworthy of the profession.

Is it not entirely understandable, then, that the ruckus between the highest council of American medicine and the government over the difference of 2.5 or 5.5 per cent borders on the absurd?

IV

Historically, physicians have been making charges on a basis of usual, customary, and prevailing fees. Generally, these levels of charges are readily recognized by third parties, although few make payment that high. We have with us programs such as Medicare paying the 75th percentile of usual and customary fees for 1970 and CHAMPUS paying usual and customary fees on a current basis. Many plans are in between and some, including Medicaid, are much lower. But this is the dignified, proper, and correct method of charging, and the state medical association has on many occasions endorsed the concept.

The rational approach under Phase II—or better yet, with or without economic controls—is to recognize physicians' charges on a basis of usual, customary, and prevailing fees. This would be most appropriate now as fair to physicians, patients, third parties, and the spirit of turbulence in the economy. It would, in effect, say that the medical profession isn't bargaining for increases in pennies, that it recognizes its responsibilities, and that it asks only what is fair and just.

And this same sort of agreement could provide for *current* statewide profiles of usual and customary fees on which to base indicated revisions, documented by valid fluctuations in the economy. State medical associations and physician-sponsored medical care foundations are equipped to make this concept work. Most physicians would ask nothing more; few physicians would accept anything less.—R.B.K.

Forty-Seven Ways to Be Worse Off

Professional liability insurance!

Mere mention of this vitally essential protection for the practicing physician stirs up nightmares with dollar marks in front of them. Logically so, too, for in some few Western states, the premium has increased more than 1,000 per cent in a decade. The market is thinning out, as more and more carriers are abandoning areas of high claim incidence. And frankly, professional liability insurance isn't cheap anywhere.

Many reputable, reliable carriers issue professional liability insurance, and they are more plentiful in New England, along the Atlantic Coast, and in the South than anywhere else in the nation. Generally, these companies fall into one of two categories. Either they are in a casualty insurance trade association variously known as the Insurance Rating Board or "bureau companies" or they act independently in arriving at their premium rates.

The bureau companies tend to fix rates on the high side, because their broader and bigger market has also resulted in their having great exposure to professional liability claims. That is precisely why physicians in Mississippi with liability policies issued by companies in this group have seen a jump in premium rates during the past year.

Among the bureau companies' premium rating on a state-by-state basis, Mississippi stands in the lower half with 33 states having higher rates and 17 having lower premium tabs. The minimum safe $100,000/$300,000 coverage under bureau tables begins with a premium of $209 for Class I physicians, those doing no surgery. It graduates steeply upward to $1,323 for Class V physicians doing major surgery and anesthesiology.

But for more than 10 years, the association has sponsored a program with the St. Paul Companies, a most respected, reliable independent group. Functioning apart from the bureau companies, St. Paul offers the same coverage for a lower premium. Almost 750 members of the association purchase professional liability insurance from St. Paul.

As of Nov. 1, 1971, the St. Paul rates for 100/300 coverage for Class I physicians were $102 or less than half the cost of coverage from a bureau company. Protection up to 100/300 for Class V physicians was $650. Under the St. Paul program, 47 states had rates higher than Mississippi, while only New Hampshire, North Caro-

lina, and South Carolina had lower rates. The District of Columbia accounts for the 51st state.

The St. Paul program is based on individual issue to members with review of claims threatened or actually initiated guaranteed by the association, subject only to the wishes of the assured physician. So when the next professional liability policy renewal comes around, it may be a good idea to call in the independent insurance agent and ask him to explain the bureau companies' state-by-state premium rate tables as well as that for St. Paul. The difference will be clear.—R.B.K.

Central Medical Is Leading the Way

The drug culture, that phony and dangerous facade behind which too many Americans are trying to hide, has produced a harvest of tragedy. As weary as we may be of the endless papers, speeches, brochures, film documentaries, TV shows, and just about every known format for communications on drug abuse, we still have not written enough, said enough, nor done enough. It just may well be our number one health problem in these United States.

Not all drug abusers secure their covert supply of capsuled trouble from a back alley pusher. And by no means does more than a minority get drugs through legitimate channels on a physician's prescription. In fact, aspirin is probably the most abused drug today.

Last June at Atlantic City, President Nixon asked that the American Medical Association lead the fight against drug abuse. He called for the medical profession to take any and all measures, both as doctors and community leaders, to arrest this tragic traffic. The profession continues to respond, but so much remains to be done.

Recently, the state medical association's largest component, the Central Medical Society, declared a moratorium on prescribing amphetamines except for clear medical indications in narcolepsy, hyperkinesis, and certain psychiatric disorders. Other local societies are taking similar actions.

Does a moratorium work? A recent spot survey of a representative sample of Jackson's 80-odd pharmacies revealed that prescriptions for amphetamines decreased 95 per cent in a week following the Central's action. A few pharmacies no longer stock the pep pills. The state association's Board of Trustees has applauded and commended the action.

The action of the Board of Trustees recognizes the gravity and magnitude of the drug abuse problem, but the Board properly stopped short of invoking such a moratorium for the entire state, realizing that such action remains within the purview of the House of Delegates. The Trustees have asked that each Mississippi physician weigh the problem seriously, and the Board makes clear the fact that illicit sources of amphetamines are still the major suppliers. The recent seizure of 122,000 amphetamine tablets at Hattiesburg bears this out.

And the Board has reminded the membership of the 1969 policy condemning the so-called "rainbow pill" regimen for obesity, the shotgun prescribing of amphetamines, cardiac glycosides, thyroid hormones, diuretics, anorexiants, barbiturates, and laxatives.

Another significant part of the Central Medical Society's program is educational. The society has established a speakers bureau with physicians ready, willing, and uniquely able to appear before groups of virtually all ages and endeavors. It is an example worth emulating, and the state association will lend support to this and other educational programs.

Finally, the mish-mash drug control law rammed through the 1971 Regular Session of the Legislature in its final hours is defective and generally unworkable. Every candidate for Governor last summer pledged to seek corrective action, as did many of the members of the Legislature.



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Adverse Reactions: Rarely severe enough to require discontinuation of therapy. Unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include palpitation, tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria

Convenience of two dosage forms: TEPANIL Ten-tab tablets. One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.). TEPANIL. One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given mid-evening to overcome night hunger. Use in children under 12 years of age is not recommended

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unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

- Prevents painful night leg cramps
- Permits restful sleep
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Prescribing Informotion—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indicotions:** For the prevention and treotment of nacturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis ond stotic foot defarmities. **Controindications:** Quinamm is contraindicated in pregnoncy because af its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptams af cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, ar visual disturbances accur. **Dosage:** One tablet upon retiring. Where necessary, dasage may be increased to one tablet fallawing the evening meal and ane tablet upon retiring. **Supplied:** Bottles of 100 ond 500 toblets.

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(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps.

The practicing physician who can and will devote himself and herself to fighting drug abuse is the most effective member of the team arrayed against this problem. And the drug problem is here in Mississippi and in serious magnitude, demanding urgent and decisive action. The medical profession can be counted on to furnish leadership and guidance for responsible team action. Failing this, the tragic consequences upon society and our citizens are too horrible to contemplate. —R.B.K.

POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Jan. 10-14, 1972

ELECTROCARDIOGRAPHY INTENSIVE COURSE

University Medical Center, Jackson
Jan. 10-14, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Thomas M. Blake, M.D., professor of medicine, The University of Mississippi School of Medicine

The second electrocardiography session of the year, this one-week intensive course will emphasize clinical electrocardiography, using slides, EKG's and other visual aids.

Jan. 15, 1972

BEHAVIOR MODIFICATION WORKSHOP FOR PEDIATRICIANS

University Medical Center, Jackson
Jan. 15, 1972, beginning at 9 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Participants:
Gene G. Abel, M.D., assistant professor of psychiatry, The University of Mississippi School of Medicine
David H. Barlow, Ph.D., assistant professor of psychiatry (psychology), The University of Mississippi School of Medicine
Thomas E. Sajwaj, Ph.D., assistant professor of psychiatry (psychology), The University of Mississippi School of Medicine
Robert W. Scott, Ph.D., assistant professor of psychiatry (psychology), The University of Mississippi School of Medicine
Elbert A. White, M.D., pediatrician, Corinth, Mississippi

Saturday Morning

WELCOME
Dr. White
CHILD PSYCHOTHERAPY: WHERE DO BEHAVIORAL APPROACHES FIT IN?
Dr. Abel
OVERVIEW OF BEHAVIOR MODIFICATION PRINCIPLES FOR APPLICATION WITH CHILDREN AND THEIR FAMILIES, PART I
Dr. Scott

Saturday Afternoon

OVERVIEW OF BEHAVIOR MODIFICATION PRINCIPLES FOR APPLICATION WITH CHILDREN AND THEIR FAMILIES, PART II
Dr. Scott
EXAMPLES OF BEHAVIOR MODIFICATION METHODS WITH YOUNG CHILDREN IN THE HOME
Dr. Sajwaj
COUNSELING WITH UNRULY ADOLESCENTS AND THEIR PARENTS VIA CONTINGENCY CONTRACTING
Dr. Barlow

Feb. 7-11, 1972

GASTROENTEROLOGY INTENSIVE COURSE

University Medical Center, Jackson
Feb. 7-11, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Lidio O. Mora, M.D., associate professor of medicine and chief, division of gastroenterology, The University of Mississippi School of Medicine

This practical review of gastroenterology, offered for the second time this year, will feature conditions commonly seen in office practice. The course will stress endoscopy of all kinds, especially rectal sigmoidoscopy. The curriculum will include ward rounds at both the University Medical Center and the Jackson VA Center.

POSTGRADUATE / Continued

CIRCUIT COURSES

SOUTHERN CIRCUIT

Biloxi—Jan. 5—Session 1; Howard Memorial Hospital, 6:30 p.m.

Gulfport—Feb. 2—Session 2; Gulfport Memorial Hospital, 6:30 p.m.

Session 1—Current Trends in the Treatment of Carcinoma of the Colon, Dr. S. R. Evans

Newer Techniques in the Diagnosis of Chest Disease, Dr. G. Boyd Shaw

Session 2—Emergency Room Diagnosis and Treatment of Drug Abuse, Dr. Gene G. Abel

Avoiding Patient Drug Abuse: What the M.D. Can Do, Dr. B. Steve Smith

Young People and Drugs, Medical Student

SOUTHWESTERN CIRCUIT

McComb—Jan. 11—Session 2; Southwest Mississippi General Hospital, 7 p.m.

Session 2—Case Presentations

NORTHERN CIRCUIT

Columbus—Feb. 22—Session 2; Ramada Inn, 6:30 p.m.

Session 2—Bacterial Susceptibility to the Newer Antibiotics, Dr. William R. Lockwood

Current Trends in the Management of Septic Shock, Dr. William A. Neely

FUTURE CALENDAR

January 5, 1972
CIRCUIT COURSE, BILOXI

January 10-14
ELECTROCARDIOGRAPHY INTENSIVE COURSE

January 11
CIRCUIT COURSE, MCCOMB

January 15
BEHAVIOR MODIFICATION WORKSHOP FOR PEDIATRICIANS

February 2
CIRCUIT COURSE, GULFPORT

February 7-11
GASTROENTEROLOGY INTENSIVE COURSE

February 14-16
CARE OF ACUTE CARDIAC PATIENTS, BILOXI
Mississippi Heart Association

February 22
CIRCUIT COURSE, COLUMBUS

March 1
CIRCUIT COURSE, BAY ST. LOUIS

March 2
CIRCUIT COURSE, HATTIESBURG

March 9
CIRCUIT COURSE, HATTIESBURG

March 13-17
OBSTETRICS INTENSIVE COURSE
STROKE AND NEUROLOGICAL DISEASES INTENSIVE COURSE

March 16
CIRCUIT COURSE, HATTIESBURG

March 20-24
CARDIOLOGY INTENSIVE COURSE

April 10-14
PEDIATRICS INTENSIVE COURSE

April 11
CIRCUIT COURSE, MCCOMB

April 17-21
CARDIOLOGY INTENSIVE COURSE

April 24-28
RADIOLOGY INTENSIVE COURSE

April 25
CIRCUIT COURSE, COLUMBUS

May 1-5
NEPHROLOGY INTENSIVE COURSE

May 8-11
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

PERSONALS

WILFRED Q. COLE of Jackson has been elected to the Committee of the Section on Diseases of the Chest of the American Academy of Pediatrics. This section committee is the executive body of the section which consists of pediatricians with special interest in tuberculosis and other pulmonary diseases.

EDWARD CURRIE of Gulfport was guest speaker at the fall meeting of the Coast Counties Medical Assistants.

WILLIAM G. GILES announces the opening of his office for the practice of orthopaedic surgery in

the Medical Arts Building, 405 South 28th Avenue in Hattiesburg.

Charles H. Harrison, Jr., and V. Frank Carey announce their association in the practice of medicine limited to urology and urologic surgery at 1409 East Union Street in Greenville.

Jim G. Hendrick of Jackson won first place on an oil painting in the Art Enthusiasts Annual.

Clifton L. Hester has associated with Elmer J. Harris, James M. Packer, Robert P. Henderson, and Ottis G. Ball in the Radiological Group, P.A., at 316 Medical Arts Building in Jackson.

Calvin T. Hull of Jackson has been elected president of the Hinds County chapter of the Mississippi State Alumni Association. Dr. Hull, UMC assistant professor of obstetrics and gynecology, is also president of the Jackson Gynecic Society.

Ben B. Johnson, John D. Bower, Gary Boone and Sybil Raju, all of Jackson and the University Medical Center, attended the National Kidney Foundation 1971 annual meeting and the American Society of Nephrology meeting in Washington, D. C.

Donald Killelea of Natchez took part in a panel discussion on drug education held in Natchez as an in-service training program for elementary and secondary teachers.

Eric A. McVey, Jr., of Jackson was on the Mississippi Diabetic Association committee for Diabetic Week which recently sponsored a week of free testing for diabetes in Jackson.

J. D. Morgan announces the opening of his office for the practice of internal medicine and treatment of cardiopulmonary disorders at 622 Delaware Avenue in McComb.

Charles C. Randall of Jackson has been elected to a three-year term as governor of the Mississippi Society of Mayflower Descendants. Ben B. Johnson of Jackson was elected surgeon general.

E. T. Riemann, Jr. of Gulfport is the new president of the Coast Counties Medical Society. Other officers are Wesley McFarland of Bay St. Louis, president-elect; Griffin Bland of Gulfport, vice president; J. Hurd Gaddy of Long Beach, secretary-treasurer; and Frank G. Gruich of Biloxi, board of censors.

Leo Scanlon, Jr., of Vicksburg was keynote address speaker at the annual meeting of the Mississippi Society of American Medical Technologists in Vicksburg. Dr. Scanlon spoke on the application of medical science to crime investigation.

Perrin N. Smith announces his association with John N. Harrington for the practice of obstetrics and gynecology at 221 North 7th Street in Columbus.

J. L. Stith of Ocean Springs has been elected chief of staff-elect for 1971-72 at Ocean Springs Hospital. Other officers announced by Ray L. Wesson, present chief of staff, are: Louis Rubenstein, secretary-treasurer; Sam Levi, executive committeeman; and Frank Garbin, credentials committeeman.

Ray L. Wesson of Ocean Springs has been elected president of the Ocean Springs Jaycees. Dr. Wesson limits his practice to general and thoracic surgery.

E. A. White, III, of Corinth has been elected president of the Alcorn County Medical Club. Bob Davis is vice president, and Tommy Alexander is secretary-treasurer.

Frank M. Wiygul of Jackson participated in the Epilepsy Epidemiology Workshop sponsored by the Public Health Service Advisory Committee on the Epilepsies of the National Institute of Neurological Diseases and Stroke in Minneapolis.

John D. Wofford of Greenwood was inducted as a Fellow of the American College of Chest Physicians at the annual meeting in Philadelphia.

NEW MEMBERS

Currie, Edward H., Gulfport. Born Juling, China, Sept. 20, 1922; M.D., University College of Medicine, Richmond, Va., 1951; interned William Beaumont Army Hospital, El Paso, Tex. one year; ob-gyn residency, Ohio State University Hospital, Columbus, Ohio, July, 1952-July, 1953; ob-gyn residency, Brooke Army Hospital, San Antonio, Tex., July, 1953-July, 1954; ob-gyn residency, Lackland Air Force Hospital, San Antonio, Tex., July, 1963-July, 1965; elected Nov. 1971 by Coast Counties Medical Society.

Pierce, Donald Erwin, Greenwood. Born Brownwood, Tex., Nov. 15, 1938; M.D., Louisiana State University School of Medicine, New Orleans, La., 1963; interned Wadsworth V. A. Hospital, Los Angeles, Calif., one year; pathology residency, same, Sept. 1, 1966-Aug. 30, 1970; elected Oct. 1971 by Delta Medical Society.

DEATHS

BAILEY, JULIAN THOMPSON, Meridian. M.D., Tulane University School of Medicine, New Orleans, La., 1909; postgraduate same and John Hopkins; past president of East Mississippi Medical Society; member of the Fifty Year Club of MSMA; Emeritus member of MSMA and AMA; died Nov. 27, 1971, age 81.

LIPSEY, JAMES H., Brookhaven. M.D., New York University School of Medicine, New York, N. Y., 1923; died Nov. 16, 1971, age 73.

STREET, A., Vicksburg. M.D., Columbia University College of Physicians and Surgeons, New York, 1913; internship and residency, Roosevelt Hospital, New York, 1914-1916; diplomate, American Board of Surgery; 1st Lt., M.C., U. S. Army, 1917-1919; Fellow, American College of Surgeons; Chief of Staff, Mercy Hospital-Street Memorial, Vicksburg; President, Street Medical Foundation; chairman and member, various councils and committees, and president, Mississippi State Medical Association, 1941; member, Fifty Year Club; died Dec. 3, 1971, age 90.

New Orleans Plans 35th Graduate Assembly

The New Orleans Graduate Medical Assembly will hold the 35th annual meeting, March 6-9, 1972, at The Fairmont Roosevelt Hotel.

Twenty distinguished speakers have been selected to report on medical advancements in their specialty areas. Medical motion pictures, roundtable luncheons, a clinicopathologic conference and entertainment for wives will also be featured.

A special pre-meeting symposium by Lederle Laboratories is planned for Sunday, March 5, entitled "Our Polluted Environment—Its Problems for the Clinician."

This program is acceptable for 22 prescribed hours and eight elective hours by the American Academy of Family Physicians.

For further information write to The New Orleans Graduate Medical Assembly, 1430 Tulane Ave., New Orleans, La. 70112.

ACS Names New Governors, Officers

Dr. J. Harvey Johnston, Jr., of Jackson has been named to the American College of Surgeons Board of Governors.

Three new officers and 26 new members of the Board of Governors of ACS were elected at the recent annual Clinical Congress of the College held in Atlantic City, N. J., bringing the total number of Governors to 189.

Attendance at this world's largest meeting of surgeons was 15,420, with physicians' registration 9,840. Doctors came from more than 50 countries.

Dr. Bentley P. Colcock, Boston, is new chairman; Dr. Robert C. Hickey, Houston, is vice chairman; and Dr. Harrison R. Wesson, Montclair, N. J. is secretary.

Also elected to the executive committee was Dr. Luis F. Sala, Ponce, Puerto Rico. Dr. Howard Ulfelder, Boston, was re-elected and Dr. David Sabiston, Jr., Durham, remains a member.

Governors act as communication links between the 32,000 Fellows (members) of the College, 79 local chapters, specialty societies, Regents (the 19-member policy making body of the College) and headquarters staff. They represent each state in the United States, each province of Canada, any country with more than 15 Fellows, a number of related surgical associations and societies, and the federal medical services.

Governors serve a three-year term, and may not serve more than three terms in succession.

The American College of Surgeons is a voluntary, scientific and educational institution organized in 1913 for the sole purpose of improving care of the surgical patient. ACS contributions toward this goal include founding the first hospital accreditation program to improve surgical care; originating methods to evaluate the quality of hospital care; presenting outstanding research papers by younger surgeons; launching a program to survey cancer programs in hospitals; building guidelines for the surgical training of residents in teaching hospitals; establishing a nationwide program for continuing education and self-assessment of surgeons in practice; pioneering in development of trauma programs to improve care of the injured; organizing, jointly with the NIH, an organ transplant registry to collect information on transplants performed throughout the world, and currently engaging in a study to evaluate the potential for improvement in the organization and delivery of surgical services to the people of the United States.

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When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

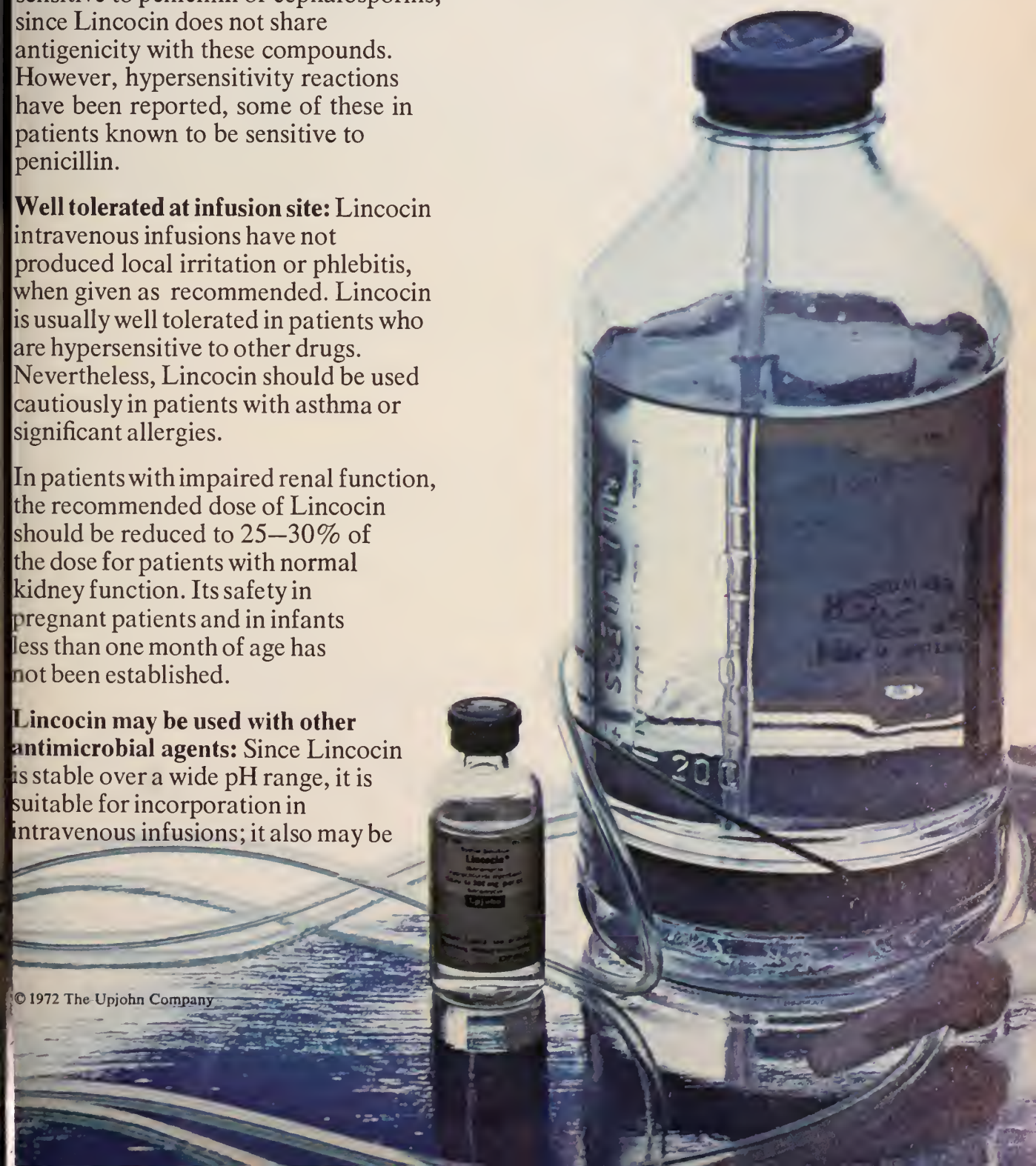
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

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Care Foundation, EMCRO Stress Quality Service and Leadership of M.D.s

The Mississippi Foundation for Medical Care finalized corporate organization in December when the Board of Directors conducted the first annual meeting of the wholly owned, state medical association subsidiary.

The separate but related peer review program moved forward with production of care quality review reports under the Experimental Medical Care Review Organization, an activity of the association supported in the main by a grant of $369,000 from the National Center for Health Services Research and Development.

Acting within the framework of the House of Delegates' mandate last May, the Administrative Members of the Foundation, the Board of Trustees, re-elected all care Foundation directors for initial staggered terms, conducted the first annual directors meeting of the Foundation, and acted to accelerate the education program on Foundation activities.

Named to three year terms on the Foundation Board were Drs. Lyne S. Gamble of Greenville, James O. Gilmore of Oxford, and J. T. Davis of Corinth.

Directors for two years are Drs. Paul B. Brumby of Lexington, Millard S. Costilow of North Carrollton, Carl G. Evers of Jackson, and Guy T. Vise of Meridian.

Elected to one year terms were Drs. W. E. Moak of Richton, Everett Crawford of Tylertown, and James T. Thompson of Moss Point.

Officers of the Foundation, named to one year terms, are Dr. Davis, chairman of the board; Dr. Everett Crawford, vice chairman; and Dr. Gilmore, secretary-treasurer.

Foundation staff officers elected are Rowland B. Kennedy of Jackson, president and chief executive officer, and H. Cody Harrell of Jackson, vice president and comptroller.

The nine Trustees serving as Foundation directors assure that the will of the House of Delegates will be followed with the Foundation remaining under medical association control, responsive to the membership. Forty-two per cent of members paying 1972 dues through the first week in December also applied for Participating membership in the Foundation. All were elected by the directors.

Dr. Costilow serves on the Foundation Board, furnishing a link of continuity with the peer review program. Two directors seats remain open under the MFMC By-Laws. They will be filled in February, Dr. Davis said.

New committees of the Foundation include the Finance Committee made up of the officers of the Board, Drs. Davis, Crawford, and Gilmore.

Also named at the annual meeting is a Foundation Standards Committee which will work in perfecting arrangements with insurance companies and agencies of government. Members include Dr. Costilow, named chairman, and Drs. Joseph B. Rogers of Oxford, Guy T. Vise of Meridian, and Jack A. Atkinson of Brookhaven, who is also chairman of the Council on Medical Service.

Dr. Davis said that the Standards Committee will begin meetings with third parties on perfecting contracts with the Foundation early in 1972. For the time being CHAMPUS, third largest government care program in the nation and only public plan paying current usual and customary fees, will continue under the state medical association. The present contract with the Department of Defense continues through March 1973, Dr. Davis said.

The EMCRO program has become fully operational on comprehensive review of inpatient care in eight hospitals in as many Mississippi cities. In-

cluded are institutions at Cleveland, Winona, Jackson, McComb, Hattiesburg, Laurel, Gulfport, and Pascagoula. The computer-based review program is under the operational supervision of the association's Committee on Peer Review.

Input from the eight institutions with approximately 1,400 beds is reviewed under Mississippi specialty society criteria representing 12 of the 20 specialties. Reports are made to medical staffs of participating hospitals for education and self-evaluation. The program is nonpunitive with emphasis on care quality improvement.

Dr. Costilow, peer review chairman, said in a report to the Board of Trustees that additional hospitals will be included in the project as quickly as staff and data processing capacities permit. The program is moving into review of outpatient, ambulatory care, he added.

Dr. Costilow said that a major segment of the program at the 104th Annual Session will be devoted to the Foundation and EMCRO project with nationally known out-of-state speakers as well as state association leaders active in the project.

He said that the special issue of the JOURNAL (November 1971) has been successful as a communications and education tool. Reprint requests number more than 1,000, he said, from 21 state medical associations, a number of major metropolitan county societies, national specialty societies, and other medical care foundations.

CHAMPUS Deductible Must Be Satisfied

CHAMPUS fiscal administrators reject thousands of claims each month because the annual outpatient deductible has not been met.

Officials of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) are reminding beneficiaries that they can help prevent the rejection of these claims and expedite processing and payment by accumulating enough bills and receipts for outpatient care to satisfy the $50 individual or $100 family deductible before submitting their first claim each fiscal year. It is not necessary that these bills be first paid before being used to satisfy the outpatient deductible. An itemized bill reflecting a legal obligation to pay is sufficient.

As soon as sufficient charges are incurred, the beneficiary should complete his portion of the claim form and send the form with the itemized bills or receipts to the state fiscal administrator, who will issue a deductible certificate. After the deductible is satisfied, beneficiaries are encouraged to submit claims every two or three months or more frequently when the value of the receipts or itemized statements exceeds $25 to $30.

Legislation establishing CHAMPUS requires program beneficiaries to meet a deductible each fiscal year (1 July-30 June) for authorized health care or services received under the outpatient portion of the program. The amount of this deductible is $50 when only one beneficiary uses the program and $100 if two or more members of a family are receiving civilian health care.

Reimbursement claims for inpatient related care may be submitted at any time without regard to the outpatient deductible.

SBH Warns About Vibrio Food Poisoning

Vibrio parahaemolyticus is a gram-negative, rod-shaped, facultative anaerobe which can cause rather severe food poisoning, according to Dr. Durward L. Blakey, SBH preventable disease control director. Onset of epigastric pain, nausea, vomiting, diarrhea with mucus and blood, fever, chills, and headache usually occurs within 15-17 hours after eating partially cooked, lightly pickled, or raw seafood. Symptoms usually subside in one to two days.

This form of food poisoning has been known in Japan for 20 years, and the first reported U. S. outbreak occurred in Washington state in 1969. A recent Maryland outbreak associated with crabmeat affected over 300 persons.

Although *V. parahaemolyticus* is widely distributed in the marine environment, apparently not all strains are enteropathogenic. The investigation of foodborne outbreaks in which seafoods are suspect should include tests for the presence of this organism.

V. parahaemolyticus does not grow on the usual media employed for isolation of other enteric pathogens. It requires, in addition to other metabolites, a high salt concentration. Specimens of stool and food suspected to contain this organism should be sent in plain containers, without holding or transport media or preservative, to the state laboratories as soon after collection as possible. Full clinical details and specific mention of this organism should accompany or precede delivery of the specimens, said Dr. Blakey.

1972 Robins Award Is Announced

The Eleventh Annual Mississippi State Medical Association-Robins Award for outstanding community service by a state physician has been announced to the component medical societies by the Board of Trustees. The 1972 award will be presented at the 104th Annual Session during closing ceremonies on May 11.



MSMA-Robins Award

Dr. Arthur E. Brown, president, and Dr. J. T. Davis, chairman of the Board of Trustees, said that each component society had been invited to submit a nomination for the honor. The award is cosponsored annually by the association and the A. H. Robins Co. of Richmond, Va., a long-established manufacturer of ethical pharmaceuticals.

Drs. Brown and Davis said that nominees must be members of the state medical association and that the community service recognized by the local society's nomination must be apart from purely professional attainment, since suitable awards in this connection already exist.

Generally, the service by the physician-nominee should have benefitted the local or state communities in a civic, cultural, or general economic sense. It need not, however, have been a single achievement, since many outstanding citizens contribute to community betterment through a series of services in varying leadership roles.

Nominations should be made by letter, and there are no restrictions upon length or attached exhibits which assist in establishing the nominee's qualifications and record of achievement. Drs. Brown and Davis said that each letter of nomination must be signed by an officer of the component medical society.

Deadline for submission of nominations to the state medical association is Jan. 31, 1972. Each nomination will be acknowledged, and the Board of Judges, consisting of the three vice presidents, will review the nominations in February.

The Robins series was instituted in 1962, and the award consists of a sculptured bronze plaque in *bas* relief, engraved, and mounted on a mahogany panel.

The 10 Mississippi physicians who have received the high honor are Dr. Thomas G. Ross of Jackson, nominated by the Central Medical Society in 1962; Dr. Frank M. Davis of Corinth, by the Northeast Mississippi Medical Society in 1963; Dr. Howard A. Nelson of Greenwood, by the Delta Medical Society in 1964; and Dr. Maura J. Mitchell, by the South Mississippi Medical Society in 1965.

Dr. J. T. Davis of Corinth, by the Northeast Mississippi Medical Society in 1966; Dr. Frank M. Acree of Greenville, by Delta Medical in 1967; Dr. W. H. Andershon of Booneville, by Northeast in 1968; Dr. Omar Simmons of Newton, by the East Mississippi Medical Society in 1969; Dr. W. J. Aycock of Calhoun City, by the Northeast Society in 1970; and Dr. Walter H. Rose of Indianola, by Delta Medical in 1971.

Vicksburg Initiates Screening Program

The Youth Services Bureau, a branch of the Vicksburg-Warren Community Services Center, has initiated a program which is the first of its kind in the nation.

The Bureau will sponsor physical examinations for certain school age children to discover any physical maladies which could cause poor class room performance and that may lead to delinquent behavior.

The examinations include taking medical history, visual and hearing tests, other laboratory procedures and a general physical examination.

All tests will then be evaluated to determine physical conditions, normal academic achievement, primary emotional disorders and specific learning disabilities.

The Warren County Health Department under Dr. A. J. Messina has volunteered to do the physical screening. These children will be non-delinquent as well as children referred to the youth court. The examinations will be given routinely to all children referred to the youth court in the future.

Dr. Messina will be assisted by Mrs. L. G. Horn and volunteers from the West Mississippi Medical Auxiliary who will do paper work, give certain tests and provide follow-up corrective work.

Emory Institutes "Patient Course"

An innovative new course for freshman medical students at Emory lets the future doctor "walk in the patient's shoes."

Begun last fall with the title "Introduction to Health and Medicine," the course is a broad overview of the major problems of health and the health-care systems in the United States in the 1970s.

One of its goals, according to Dr. William M. Marine, course director, is to have the student appreciate the patient's point of view in an illness.

Half of the 100 participating students were assigned to private patients and their families under supervision of practicing physicians in the Atlanta area. The other half worked with patients at Grady Memorial Hospital under residents and interns.

Each student had his own patient and family. The student did not attempt to give medical treatment or advice and did not replace the physician in any way, Dr. Marine explained. His primary purpose was to see the health problem through the eyes of the patient and the patient's family. The students visited in the patients' homes.

Dr. Marine said he especially wanted each student to know about the emotional impact of illness on the patient and family. He also wanted the student to learn the financial costs of illness, and how the patient's program of health insurance (if any) helped in meeting such expenses.

The patients gave high marks to their students. Among the comments was the following written critique from a private patient:

"I think this type of program is great. I classify doctors in two groups—'medical' and 'people' doctors. A 'medical' doctor I prefer not to deal with. A 'people' doctor, who of course has the medical expertise, is one who listens, talks, and explains things. Your program will help us have more doctors who are concerned for the patient and show it."

In the opening segment of the three-part course, there were lectures and seminars on the physician and medical care in general—how the private physician practices medicine, how the American Medical Association views the practice of medicine, how health is financed. The seminars were led by active practicing physicians in the Atlanta area.

A second portion was involved with the physician, the patient, and the patient's family; it featured patient interviews and discussions led by psychiatrists.

The third and last phase dealt with the physician and the community. Various epidemiology techniques were discussed—the occurrence, distribution, and types of disease. Overall focus of the course was on the behavioral sciences in medicine.

Most of the faculty for the course were health professionals in the community including 84 physicians on the Emory medical school's clinical faculty and 100 public health nurses. Over 40 full-time Emory faculty and 25 members of the Grady house staff participated.

Dr. J. J. Wildgen Is AAFP President

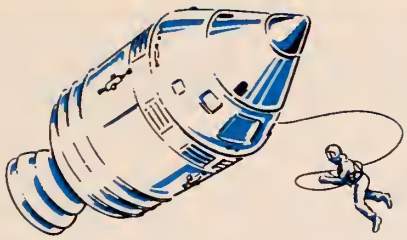
Dr. J. Jerome Wildgen, a family physician from Kalispell, Mont., became president and Dr. James L. Grobe of Phoenix, Ariz., was named president-elect of the American Academy of Family Physicians at the AAFP Congress of Delegates in Miami Beach.

The AAFP, formerly the American Academy of General Practice, is the national association of some 31,000 family doctors. Second largest of the nation's medical groups, it is the only such group to require its members to take continuing education—150 credit hours every three years. The Academy's four-day Scientific Assembly, held annually immediately following three days of meetings by the Congress, is one means by which Academy members obtain such credit.

Dr. Wildgen, 47-year-old graduate of the University of Kansas School of Medicine, assumed the presidency after a year as president-elect. He has been a member of the Academy's Board of Directors for three years. Dr. Wildgen is a clinical instructor and preceptor in family medicine at the University of Washington School of Medicine and serves as a consultant in Family Practice to the U. S. Air Force. He is a charter diplomate of the American Board of Family Practice.

Other officers elected by the 1971 Congress: Dr. A. Alan Fischer, Indianapolis, Ind., vice president, and Drs. Carl B. Hall, Charleston, W. Va.; Jack G. Phipps, Wichita, Kan., and George A. Rowland, Millville, Pa., members of the Board of Directors for three-year terms. Drs. James G. Price, Brush, Colo., and Stanley A. Boyd, Eugene, Ore., were re-elected speaker and vice speaker, respectively, of the Congress of Delagates.

Dr. William E. Lotterhos of Jackson, Miss. is immediate past president.



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2** tablets contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

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During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

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Children Participate In Framingham Study

Children of parents who have participated over the past 20 years in the National Heart and Lung Institute's Framingham Heart Study are being invited to take part in the Framingham Offspring Study sponsored by HEW's NHLI Epidemiology Branch, National Institutes of Health.

The goals of this study are 1) to determine to what extent factors known to increase susceptibility to atherosclerosis and coronary heart disease tend to cluster in families and 2) to assess the importance of hereditary factors in the development and clinical expression of cardiovascular disease.

Among the 5,209 persons originally entered in the Framingham Heart Study, there were 1,644 families in which both husband and wife participated. A random sample of 800 of these families has been selected for the Offspring Study. A unique feature of the new study is that the children will now be examined at approximately the same ages that their parents were when first examined 22 years ago. In no other investigation has it been possible to make direct comparisons of such factors as blood cholesterol of parents and their children at similar ages.

Those enrolling in the Framingham Offspring Study will receive a cardiovascular examination similar to that which their parents have undergone every two years as participants in the Framingham Study. It includes 1) a medical history; 2) medical examination of the cardiovascular system; 3) an electrocardiogram; 4) a lung function test; and 5) blood-sample analysis for cholesterol, lipoproteins, and sugar.

Dr. William B. Kannel, who has been associated with the Framingham Heart Study for 20 years and has been its director since 1965, will also direct the examinations of the children. The Framingham Union Hospital will provide laboratory services under a contract with the National Heart and Lung Institute with Dr. Manning Feinleib, chief of the Epidemiology Branch, as Project Officer.

Information collected from the children will be analyzed and compared with the extensive data compiled over the years on their parents in an attempt to determine whether and how much heredity influences the various factors that may lead to premature atherosclerosis and coronary heart disease.

Major risk factors in coronary heart disease, aside from age and sex, that have been identified and quantified by the Framingham Heart Study are: elevated blood levels of cholesterol and other fatty substances (collectively called lipids); elevated blood pressure; elevated blood uric acid levels and/or a tendency to gout or gouty arthritis; certain metabolic disorders, notably diabetes; obesity; and certain modes of life and habits, such as cigarette smoking and lack of physical exercise.

The Framingham Heart Study results indicate that individuals with various combinations of these "risk factors" may run up to a 30-fold increased risk from coronary attacks compared to persons with none of these risk factors working against them.

Certain of these risk factors are known to "run in families": for example, diabetes and certain blood-lipid disorders. There is also inferential evidence for a hereditary component in high blood pressure and in elevated blood uric acid levels. Little is known about the possible role of heredity in other risk factors.

The Framingham Offspring Study hopes to extend present knowledge about hereditary determinants of cardiovascular-disease and also as a factor possibly amplifying the adverse effects of potentially harmful habits or modes of life on the heart and blood vessels. Such data would provide a new dimension to present efforts to identify highly vulnerable persons before they experience serious symptoms and when the timely initiation of countermeasures against those "risk factors" that can be modified or eliminated may forestall or postpone the onset of potentially disastrous complications of atherosclerosis.

ACP Sponsors Course on Gastroenterology

The American College of Physicians will present a postgraduate course on "Gastroenterology: Digestion and Disorders of Digestion," Feb. 7-9, 1972, at the Mayo Clinic's Mann Hall in Rochester, Minn.

Dr. W. H. J. Summerskill is course director, and co-directors are Drs. James C. Cain and Alan F. Hofmann.

The course is approved for 14 hours credit by the AMA "Physicians Recognition Award" program and the American Academy of Family Practice.

Fee for ACP members and Fellows is $80 and for nonmembers, the fee is $125.

For further information and application forms, write Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Cleocin Palmitate Is Introduced

A pediatric antibiotic formulation effective against many forms of upper and lower respiratory tract infections, including Group A streptococcal pharyngitis/tonsillitis, has been introduced by the Upjohn Company.

Cleocin Palmitate offers physicians a potent agent against susceptible strains of staphylococcus, streptococcus and pneumococcus, with rapid oral absorption, few side effects and easy administration.

The new formulation derives from Cleocin (clindamycin HCl), a major antibiotic made available by Upjohn a year ago. Pediatricians have used Cleocin successfully, but it has been available only in capsules, which are sometimes difficult to administer to young patients. Cleocin Palmitate, on the other hand, is reconstituted with distilled water and given as a suspension. Like Cleocin, it is available only on prescription.

The new cherry-mint flavored suspension appears to be quite acceptable to children. Of 137 children who taste-tested the semi-synthetic compound during a variety of preliminary trials, none refused to take it and 123 accepted it readily.

According to National Health Survey estimates, the typical American child has six nose, throat, and lung infections each year. More than 110 million days were lost from school in 1967 (latest year for which figures are available) due to acute respiratory illnesses alone, NHS says. One common illness in this category is streptococcal pharyngitis which is principally caused by Group A betahemolytic streptococci, sometimes called Strep. pyogenes.

Injectable benzathine penicillin is considered the drug of choice for the treatment of streptococcal pharyngitis. The new oral Cleocin Palmitate formulation, however, is also highly effective in the eradication of streptococci from the nasopharynx.

In clinical trials involving 341 children, only 19 reported side effects from taking Cleocin Palmitate. These included rashes in nine, diarrhea in four, abdominal pain in two, vomiting in one, and miscellaneous complaints in three.

Before that, the new formulation was tested in a double-blind placebo-controlled tolerance study involving 210 healthy men. These subjects received 900 to 1,800 milligrams per day of Cleocin Palmitate or a comparable volume of the vehicle for 21 days, and none developed serious side effects or signs of toxicity.

Cleocin Palmitate is rapidly absorbed; peak blood levels are usually attained in 40 minutes. Simultaneous ingestion of food does not seem to affect absorption. In both healthy and sick children, blood levels have been relatively uniform and predictable from dose to dose and from patient to patient.

Multiple-dose studies in newborns and infants up to six months old show that the drug does not accumulate excessively in the serum and is excreted rapidly.

The granules are packaged in 80 and 200 milliliter bottles, with a drug equivalency of 75 milligrams of Cleocin per teaspoon after being reconstituted.

Laboratory tests have indicated antagonism between Cleocin and erythromycin. These drugs, therefore, should not be administered concurrently. Cleocin Palmitate is contraindicated in children who have shown hypersensitivity to preparations containing clindamycin or lincomycin.

Safety for use of the new formulation in pregnancy has not been established. Upjohn cautions that when Cleocin Palmitate is administered to newborns and infants, appropriate monitoring of organ system functions is desirable.

AABB Launches Blood Recruitment Program

The American Association of Blood Banks (AABB), the nation's largest voluntary organization devoted exclusively to blood banking, is launching a massive nationwide public education program to recruit more voluntary blood donors. A major purpose of the effort is to eliminate the high risks of hepatitis or other infections associated with the use of blood obtained from paid donors.

The new program was announced by Dr. William G. Battaile, AABB president, and Mrs. Berniec M. Hemphill, AABB treasurer, and chairman of its National Clearinghouse Program, which was established in 1951 as the first cooperative system for the exchange of blood and blood donor replacement credits between blood banks throughout the United States.

"So much has been written about the bad practices associated with paying donors that the public has a distorted picture of blood banking in the United States," said Dr. Battaile. "We must convince people that only they can eradicate bad practices and paid donors through volunteering

to give blood. We want to eradicate the paid donor as quickly as possible. Paying for blood not only increases the chance of transmitting hepatitis through transfusions, but it also discourages voluntary donations."

The new public information program, recently approved by the AABB Board of Directors at its annual meeting in Chicago, will utilize communications media and public information tools on a national, state, and local basis to increase voluntary blood donations for the benefit of all blood banks. Donors will be urged to give to the nonprofit blood collection facility most convenient to them; i.e., hospital, community blood bank, or Red Cross Center.

"Currently only about 3 per cent of the 100 million medically fit adults in the U. S. voluntarily give blood each year," Mrs. Hemphill stated. "The nation's blood needs have been rising about 12 per cent a year, and blood banks need seven million pints this year. We believe that this vital health need for our people can be met on an all-volunteer basis if we achieve proper coordination, motivation, and communication with the public," she said.

The AABB has created a special monetary fund, raised from charitable contributions and membership dues, to help pay for supplies and materials for the public education program. "We are a nonprofit organization, and our member banks can't pay the whole bill for the nationwide program that's needed," Mrs. Hemphill stated. "But hopefully, large advertising agencies will volunteer manpower and guidance to support the effort which is in the public interest."

There are two major nonprofit blood banking organizations in the United States—the AABB with its more than 1,500 hospital and community blood bank members, and the American National Red Cross which operates 59 regional blood centers. The two organizations, through their members and centers, each supply about half of the blood used in the United States that isn't purchased from commercial blood banks. The AABB has invited the American Red Cross to participate in the new public education program as a joint effort of the AABB and the Red Cross. Both groups have been working cooperatively since 1960 under an interorganizational agreement for the exchange of blood and blood replacement credits.

The AABB also will call on government and national organizations to help implement an effective program of public education to arouse and recruit volunteer blood donors on a nationwide basis. Among the groups and agencies whose help is being sought are the National Advertising Council, the American Medical Association, the American Hospital Association, the Blue Cross Association, the National Association of Blue Shield Plans, and the Health Insurance Council.

UpJohn Offers New Medical Education Concept

A new medical education concept from The Upjohn Company is being made available to all medical teaching institutions—including hospitals with training programs only for nurses and technicians—following a limited initial offering to medical schools.

The concept, called mini-text, consists of a series of 27 brief (about five minutes), single-concept teaching films ranging in subject from "Renal Factors in Blood Pressure Regulation" to "Mechanisms of Lubrication in Joints." Eight of the mini-text films are being offered for the first time concurrently with expanded distribution of the entire series. Seven of these depict various aspects of the use of lasers in medicine.

Basically, mini-text represents the salient teaching aspects in a single-concept form of the Upjohn Vanguard of Medicine films, a series of lengthier award-winning medical films that are available on temporary loan to practicing physicians. The new series, in contrast, is offered for permanent use at the approximate average cost of the prints, plus a minimal handling fee. Prints are available for $23 for 16 mm on separate reels and $26 for 8 mm cassettes for the Fairchild Mark IV projector.

In the first five months of pilot offerings exclusively by Upjohn's Medical Sciences Liaison representatives, mini-text films were purchased by 24 medical schools throughout the country.

The mini-text program is an extension of the wide variety of services already provided by The Upjohn Company for the advancement of medical care.

Catalogs with brief synopses of all mini-text films, plus specific information on lengths, prices, free trial, and utilization restrictions, are available without charge to members of the medical and allied professions. Requests should be addressed to the Professional Communications Department, The Upjohn Company, 7000 Portage Road, Kalamazoo, Mich. 49001.

M. D. Anderson Sets Virology Symposium

"Molecular Studies in Viral Neoplasia" will be the subject of the 25th Annual Symposium of Fundamental Cancer Research to be held March 8-10, 1972, at the Shamrock-Hilton Hotel in Houston.

The meeting is sponsored by The University of Texas M. D. Anderson Hospital and Tumor Institute and the university's Division of Continuing Education of the Graduate School of Biomedical Sciences at Houston.

Six major sessions will emphasize tumor viruses, their interaction with host cells, the biochemistry of their replication, potential methods for control of virus-induced tumors and the application of current knowledge of tumor virology to the problem of human cancer.

Dr. Frank J. Rauscher, director of etiology at the National Cancer Institute, will deliver the keynote address, "Viral Oncogenesis in Animals and Man—Retrospect and Prospect," preceding the opening session on March 8.

Scientific papers and commentary on March 8 will be presented by Drs. A. J. Dalton, National Cancer Institute; William T. Murakami, Brandeis University; Ursula Heine, National Cancer Institute; P. H. Duesberg, University of California at Berkeley; Werner Schafer, Max-Planck-Institut fur Virusforschung; Saul Kit, Baylor College of Medicine; Thomas Benjamin, Public Health Research Institute (PHRI) of New York City; Hidesaburo Hanafusa, PHRI; Pradman Qasba, University of Maryland School of Medicine; Peter K. Vogt, University of Washington School of Medicine.

On March 9 speakers and chairmen include Drs. T. E. O'Connor, NCI; David Baltimore, Massachusetts Institute of Technology; J. Michael Bishop, University of California at San Francisco; Maurice Green, St. Louis University School of Medicine; Michael Stoker, Imperial Cancer Research Fund Laboratory; Marcel Baluda, University of California at Los Angeles School of Medicine; Ralph Arlinghaus, M. D. Anderson Hospital and Tumor Institute; Bernard Roizman, University of Chicago; Roger Weil, University of Geneva.

Participants on the final day of the meeting include Drs. Sol Spiegelman, Columbia University College of Physicians and Surgeons; Renato Dulbecco, Salk Institute; Claudio Basilico, New York University Medical Center, School of Medicine; Raymond Gilden, Flow Laboratories, Inc.; Howard M. Temin, McArdle Laboratory, University of Wisconsin; J. G. Sinkovics, M. D. Anderson Hospital; Harald zur Hauzen, Institut fur Virologie der Universitat, Wurzburg; Robert C. Gallo, NCI; Jeffrey Schlom, Columbia University College of Physicians and Surgeons.

On March 9 the annual Bertner Award will be presented to a scientist who has made outstanding contributions to cancer research. The Wilson S. Stone Award for research accomplishments of pre-doctoral or postdoctoral students in the biomedical sciences will be presented on March 8. Dr. James M. Bowen, program chairman, will announce these award recipients early in 1972.

Inquiries concerning the 1972 symposium may be directed to Mrs. Jane Brandenberger, Information Coordinator's Office, University of Texas M. D. Anderson Hospital, Houston, Tex. 77025.

UMC Opens New Intensive Care Unit

A new 10-bed adult intensive care unit opened at University Hospital in late November, according to D. Andrew Grimes, hospital director. The new facility, he said, is equipped with the latest electronic monitoring devices.

Built with the cooperation and support of the State Division of Vocational Rehabilitation, the unit has been under construction since early spring. The new ICU, located in remodelled third floor space, replaces a smaller facility on the sixth floor.

Beds, enclosed by a curtain or glass panel, are arranged in an open design around a central nurses' station. Each bed has two oxygen, four vacuum and two compressed air tanks, and 16 electrical outlets in addition to the monitors, said Grimes.

At the nursing station, banked monitors keep track of cardiopulmonary function and temperature. A musical tone alerts staff when one of the monitored vital signs is outside desired limits. A house physician is on call at all times, backed up by a specially trained nursing staff.

Physicians may request that their patients who need the critical services of the ICU be admitted to the unit.

"Drug research gives me the tools that save lives."



A family doctor looks at new developments in the pharmaceutical industry. And he speculates on the future.

When I look back at some of my old records, I'm constantly reminded of the changes that have come about in medicine just during the past twenty-five years. Some of the diseases I treated and prayed over in the '40's are found mostly in medical history books now.

Thanks to drug research and development, we've made substantial gains in the control of cardiovascular disease, diabetes, malaria, mental illness, strep and staph infections, meningitis and a long list of ailments. It seems like only yesterday when a diagnosis of pneumonia was almost the kiss of death. Now, with modern medical techniques and drug therapy, we can offer some real help.

My records on polio, influenza and measles show an unbelievable trend for the better. New vaccines have reduced the toll of these age-old threats dramatically. And I see patients in pain from crippling arthritis helped with new medicinals unknown just a few years ago.

I hear questions about the three billion or so dollars spent by the drug industry in research during the past ten years . . . working on new and better drug products. It does seem like quite a bit of money to spend, and I realize some of it goes into dead ends. That's the problem with research, any research . . . you often don't know where you're going until you get there. I want all the tools I can get to help my patients. I want more drugs and more effective drugs. If they mean less pain, longer lives and more productive careers for those I treat . . . well, that's what really counts.

Another point of view . . . Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.

This advertisement has been reaching consumers thru THE ATLANTIC, FAMILY HEALTH, HARPER'S MAGAZINE, NEWSWEEK, SATURDAY REVIEW,

Call it what you will, it may be premalignant.

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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and Efudex® (fluorouracil) 5% cream can resolve it.

all it actinic, solar or senile keratoses, many regard it as "precancerous."[1,2]

pical fluorouracil, considered by some dermatologists to be a major dvance in the treatment of multiple solar keratoses,[3,4] offers the physi- an a relatively inexpensive alternative to cryosurgery, electrodesic- tion and cold knife surgery. Of the topical fluorouracils available, only fudex offers 2% and 5% solution and 5% cream formulations—formula- ons that have proved effective in the treatment of these mutliple lesions.

sual duration of therapy, 2 to 4 weeks.

tudies showed that with the 2% and 5% Efudex preparations, the usual ıration of therapy was only 2 to 4 weeks.[5] Other studies with topical ıorouracil revealed that when concentrations of less than 2% were sed, significant numbers of lesions recurred.[6]

reats the lesions you can't see, too.

umerous lesions, not apparent prior to 2% and 5% Efudex therapy, anifested themselves by definite reactions, while intervening skin emained relatively unaffected.[5] The early eradication of these subclini- al lesions (which may otherwise have undergone further progression) robably accounts for the reduced incidence of future solar keratoses in atients treated with topical fluorouracil—especially with 5% oncentrations.[6]

low to identify solar keratoses.

ypically, the lesion—a flat or slightly elevated brown to red-brown apule—is dry, rough, adherent and sharply defined. Multiple lesions re the rule.

redictable therapeutic response.

he response to a typical course of Efudex therapy is usually haracteristic and predictable. After 3 or 4 days of treatment, erythema egins to appear in the area of keratoses. This is followed by a moderate o intense inflammatory response, scaling and occasionally moderate enderness or pain. The height of this response generally occurs two eeks after the start of therapy and then begins to subside as treatment stopped. Within two weeks of discontinuing medication, the nflammation is usually gone. Lesions that do not respond should e biopsied.

eferences: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, rune & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *harmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, 92. 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and lein, E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

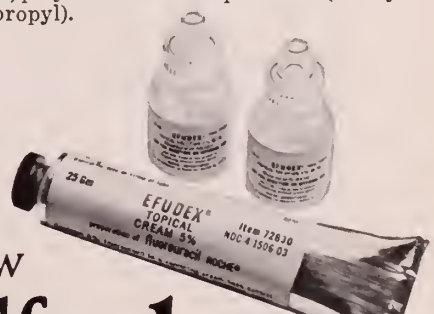
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



now
Efudex®
(fluorouracil)
cream/solution

Mead Johnson Introduces Pregestimil

Pregestimil, a new special nutritional product for infants with malabsorption problems, is being introduced by Mead Johnson Laboratories according to Dr. William M. Govier, president, Mead Johnson Research Center.

"This multi-purpose formula is the latest in our line of nutritional products for infants and children. Some of the dietary problems which Pregestimil will help to manage or control are: carbohydrate digestive problems, food allergies, chronic non-specific diarrhea, cystic fibrosis, fat malabsorption, complications of intestinal resection, and idiopathic defects in digestion or absorption," Dr. Govier said.

"Pregestimil will be available in hospitals and drug stores shortly in one pound cans in powdered form," Dr. Govier concluded.

Cardiology College Does Manpower Study

A 15-month study of what the United States has and needs in professional manpower for cardiovascular diseases is being launched this month by the American College of Cardiology (ACC).

The College is serving as administrator for a $126,655 National Heart and Lung Institute contract to evaluate cardiology training and manpower requirements in patient care, teaching and research. The study will include questionnaires to several thousand practicing cardiologists and other physicians who have a primary interest in this area of medicine. Other information will be gathered through daily diary accounts of how cardiologists spend their time.

The actual study will be conducted by a team of researchers in medical education at the University of Southern California who will work under a national advisory committee. Members of this committee will represent the College and other organizations active in cardiovascular medicine. Stephen Abrahamson, Ph.D., Los Angeles, professor of education and director of the Division of Research in Medical Education at the University of Southern California, will serve as Project Director.

Dr. Forrest H. Adams, Los Angeles, ACC President, will serve as principal investigator and chairman of the project's Advisory Committee. He said the study will yield data which will give a first-time look at present and future manpower needs serving what is today "the greatest and most important health problem in the United States as well as in many parts of the world."

"The data collected will provide a description of the current practice of cardiology and will identify the needs and opportunity for future training in cardiology," he said. "Further, this study will project the future activities of cardiologists, and thus will aid in planning in-depth training and experience for them and for those who plan to specialize in certain areas of cardiovascular medicine."

The rationale behind the study, Dr. Adams said, is the belief that "recently introduced methods in the diagnosis and treatment of cardiovascular diseases are effective only if skilled physicians and other personnel become available to deliver optimal health care. Urgently needed, is an evaluation of manpower requirements in cardiology to make these benefits available to all."

Furthermore, present trends indicate that cardiovascular disease will increase in the United States rather than decrease. Already, this disease accounts for more than half the deaths in the country, including 200,000 annually to persons under the age of 65.

Estimates show just about 25 per cent of all American adults now have definite or suspected heart disease and that an American man aged 20 has a one in five chance of having a heart attack, usually a myocardial infarction, before the age of 60. The estimated annual cost in terms of disability, of those surviving coronary diseases is more than 4 billion dollars.

The study's specific purposes will be 1) to define the current professional role of the cardiologist; 2) to determine the objectives of training programs in cardiology; 3) to determine the current and future manpower needs; 4) to determine the current and future educational needs of cardiologists; and 5) to prepare the results of the study for dissemination and to make recommendations to the National Heart and Lung Institute for improving the availability of manpower in this field.

The study will find out the number of heart disease patients actually being treated or seen in consultation by cardiologists. Also to be examined are the need for such special services as electrocardiography and coronary care units, trends in the future mode of active, sub-specialization within cardiology and centralization of special facilities such as those for heart surgery.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1972, San Francisco. Clinical Convention, Nov. 26-29, 1972, Cincinnati. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Louisiana-Mississippi Ophthalmological and Otolaryngological Society, Annual Meeting, May 11-13, 1971, Biloxi. A. V. Hays, P.O. Box 1018, Gulfport, Miss. 39501.

STATE AND LOCAL

Mississippi Academy of General Practice, Annual Meeting, July 13-15, 1972, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Mississippi State Medical Association, 104th Annual Session, May 8-11, 1972, Biloxi. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Second Wednesday, April and First Wednesday, November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie Street, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

ACR Offers Film Series

The American College of Radiology is now sponsoring a program for producing and endorsing 16 mm sound teaching motion pictures.

These productions, made under the supervision of physicians and the ACR Committee on Educational Films, are designed for continuing education, seminars and postgraduate conferences. Films are financed by contributions to the ACR Foundation.

Prints may be borrowed from the AMA Motion Picture Library, 535 North Dearborn Street, Chicago, Ill. 60610 or the National Medical Audio-Visual Center, Station K, Atlanta, Ga. 30324. Films may also be purchased from the College.

A variety of medical topics are covered in the normal anatomy, roentgen diagnoses, cancer management and public relations series. Slide sets are also available.

Tusken Named AAFP Executive Director

Roger Tusken has been named executive director and convention manager of the American Academy of Family Physicians, the Kansas City-based medical organization which is the second largest U. S. medical group and the national association of family doctors.

Tusken, 42, was elected to the post of chief administrative officer of the 31,000-member Academy by the AAFP Board of Directors on retirement of Mac F. Cahal. Tusken's accession coincides with the change of the name of the organization from American Academy of General Practice to the American Academy of Family Physicians. The change was made by the organization's governing Congress of Delegates more accurately to reflect the changing nature of primary health care.

The new executive director is a veteran association executive, with 14 years in various capacities with the Academy. He has served as assistant executive director since 1968, and has also been director of the Communications Division, director of membership services, and field assistant. His educational background is in journalism, with a degree from Michigan State University.

USPHS Gives New Smallpox Requirements

Effective immediately a Smallpox Vaccination Certificate as a condition of entry into the United States shall be requested only of those persons who, within the preceding 14 days, have been in a country reporting a smallpox infected area(s), according to Dr. Durward Blakey, director of SBH Division of Preventable Disease Control.

These countries are Botswana, Democratic Republic of the Congo, Ethiopia, India, Indonesia, Malaysia, Muscat and Oman, Nepal, Pakistan (West), and the Sudan. Those persons not in possession of a valid Smallpox Vaccination Certificate may be issued a surveillance order and placed under surveillance by State and/or local health departments.

It is the recommendation of the Public Health Service that persons planning travel to Brazil, to any country in Africa, or to any country in Southeast Asia be vaccinated against smallpox for their own protection.

AAP Recommends Reducing Lead Content

The American Academy of Pediatrics has recommended to the Federal Trade Commission that the standards for lead content of paints be reduced to less than 0.06 per cent instead of the present standard of 1 per cent.

The Academy made its recommendation to the FDA in response to the Federal Drug Administration's publication in the *Federal Register*, Vol. 36, No. 211. In this publication, the FDA proposed to declare certain heavy metal-containing paints and other surface-coatings to require special labeling for child protection.

In the enclosed AAP statement, the Academy reviews the total permissible oral intake of lead from all sources in young children. The AAP points out that the continual use of paints with higher than 0.06 per cent will increase the risk of lead poisoning in children.

The AAP's Committee on Environmental Hazards therefore favors strict Federal regulation of the lead content of paints used on surfaces accessible to children.

Additional information may be obtained by contacting Mr. George Degnon, director, AAP Department of Government Liaison, 1800 N. Kent Avenue, Arlington, Va. 22209.

Counsel to Authors

The JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, Miss. 39216, in original and at least one duplicate copy. They must be typewritten doubled spaced on 8½ by 11-inch white bond paper with a standard typewriter.

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10, but when justified to the Editors, additional references will be considered for publication. Each will be critically examined, and only valid, primary references will be published. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus,* volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made after proof sheets are received by the JOURNAL.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

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In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text.

Reprints may be obtained at cost plus shipping charges from the association and should be ordered prior to publication. The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. —*The Editors.*

Sports Medicine Meeting Planned

The American College of Sports Medicine has announced the tentative program for its 19th annual meeting to be held May 1-3, 1972, in Philadelphia, Pa.

The program includes symposia papers on wrestling, the precollege athlete, perceived exertion during muscular work, and "How-To" sessions on the following topics: prescription for exercise; examinations for inequalities of strength; preventative care of the feet; relating to the neurotically inclined athlete; use of game films for obtaining history of injury; and legal aspects of sports.

For additional information contact: Donald E. Herrmann, Exec. Secretary, American College of Sports Medicine, 1440 Monroe Street, Madison, Wisc. 53706.

Physical Therapy Film Is Available

Geriatric Pharmaceutical Corporation has made available prints of a 16 minute, 16 mm., color and sound film entitled "Decision." The movie, prepared in cooperation with the Self Employment Group of APTA and selected pharmaceutical manufacturers, was filmed at the University of California Department of Physical Medicine and Rehabilitation.

The film is tailored to students at the high school or early college level, and portrays the background and activities of the physical therapist. It follows the activity of the therapist through his professional training and practice, in the classroom, in the hospital, in the office and in the home. The film is strictly non-commercial, no products or devices are advertised or recommended.

"Decision" is of invaluable assistance to R.P.T.'s who are called upon by civic and other groups to talk about their work, since its comprehensive explanations cover virtually every facet of the profession. It can simplify and shorten the oral explanation by the R.P.T. and has been found to generate a lively "question and answer" period after its viewing.

The film is especially valuable for administrators and educators, for viewing by students who might be interested in pursuing a career in physical therapy.

Arrangements for booking on loan can be made by writing to Mr. Gustave Bardfeld, Director of Clinical Research, Geriatric Pharmaceutical Corporation, 397 Jericho Turnpike, Floral Park, N. Y. 11001.

AAP Warns Against Hexachlorophene

Solutions containing hexachlorophene should not be used for bathing newborn infants in hospital nurseries or at home, said the American Academy of Pediatrics in a statement recently prepared by the Academy's Committee on Fetus and Newborn.

In its statement the Academy pointed out that the safety of bathing infants daily with hexachorophene-containing solutions has not been established. The AAP went on to indicate that blood-levels in newborn infants bathed daily in three per cent hexachlorophene solutions have approached levels which in experimental animals have been neurotoxic. Until further evidence is provided, the Academy therefore recommended that hexachlorophene not be used for bathing newborn infants.

The Academy's Committee on Fetus and Newborn indicated that hexachlorophene is widely used in newborn nurseries, but techniques vary considerably. "They range from meticulous, double, early bathing followed by daily baths, to alternate day washing with a diluted solution followed by rinsing off," the Committee stated.

"It is not known whether or not this substance as currently used on infants is toxic," the Committee emphasized. "Although the symptoms observed in adult man and adult rats are similar, the actual blood levels at which symptoms are produced in man appear to be much higher."

Rats who were given hexachlorophene orally in large doses experienced such symptoms as leg weakness and paralysis and brain lesions associated with cerebral edema. These lesions were reversible over a period of six weeks when hexachlorophene was discontinued, the AAP said.

Similar lesions have been produced in monkeys after hexachlorophene had been administered both by injection and by application to the skin.

The Committee on Fetus and Newborn recommended in its statement that newborn infants receive no baths until discharge from the hospital (dry skin care), or be washed with plain, non-medicated soap and tap water, or tap water alone.

The Committee emphasized that the important factors in the transmission of infection are "hand contact and breaks in technique."

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Index to Advertisers

American Medical Association	4B, 24A
Arch Laboratories	17
Burroughs Wellcome Co.	10B
Campbell Soup Company	12A
Geigy Pharmaceuticals	10A
Hill Crest Hospital	11
Kay Surgical, Inc.	19
Eli Lilly and Company	front cover, 18
Medicenters of America, Inc.	8
Merrell-National Laboratories	20A, 20B
Mid-South Medical Association	4
New Orleans Graduate Medical Assembly	10
Pharmaceutical Manufacturers Assn.	32A
William P. Poythress and Co.	12D, 28A, 28B
Roche Laboratories	second cover, 3, 6, 7, 32B, 33, fourth cover
Roerig and Company	12
Saint Jude Hospital	19
G. D. Searle Company	12B, 12C
The Upjohn Company	14, 15, 24B, 24C, 24D
Wallace Pharmaceuticals	16
Winthrop Labs	4A
Thomas Yates and Company	third cover

IN CONCLUSION

Pope Paul VI received a delegation from the American Academy of Pediatrics and warmly commended U.S. pediatricians. Leading the delegation to the Vatican was Dr. Jay M. Arena of Durham, N.C., incumbent president of the Academy. The Pontiff said that pediatricians "have a particular claim on our attention because of the services they render to children."

The American Hospital and Blue Cross associations terminated their historic relationship involving each organization naming directors to the other's board. The action includes transfer of the copyrighted name and mark from AHA to BCA. The hospital association acted to revoke the Blue Cross name and mark license agreement now conferred on eligible member plans.

Rights of women employees for maternity leave have been defined in what may be a landmark federal court decision in Texas. Ruling say that leave must be granted and employees cannot be terminated because of pregnancy. Employers may not impose length-of-service condition on leave eligibility nor may the employee suffer loss of seniority. Suit was brought under Civil Rights Act of 1964.

HEW Secretary Elliot Richardson has asked the Congress to combine consumer protection activities with the Food and Drug Administratio giving new agency sharp teeth for enforcement. Mrs. Virginia Knaue consumer protection head, now has office directly under President Nixon, and she supports the Secretary's recommendation. Little chance is given for success now with Congress down on consumerism.

The costly experience in Hurricane Camille shows up in S. 1237, a bill to give federal assistance for restoration of any nonprofit medical facility damaged or destroyed in a major disaster after Jan. 1, 1971. Measure has passed Senate, and favorable action is expected in House. Disaster Relief Act of 1970 provides assistance for rebuilding publicly owned medical care facilities.



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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

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Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures.

SEP 1972

Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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This Month . . . Neck and Back Pain, Hodgkin's Disease, Maternal Mortality in Mississippi

M.S.M.A.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dose-related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infection is 4 tablets initially, then 2 tablets morning and evening. If pain persists beyond seven days, causes other than infection should be sought. After relief has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

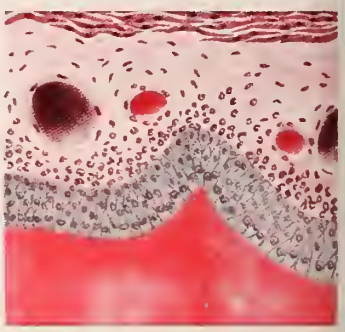
NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl, bottles of 100 and 500.

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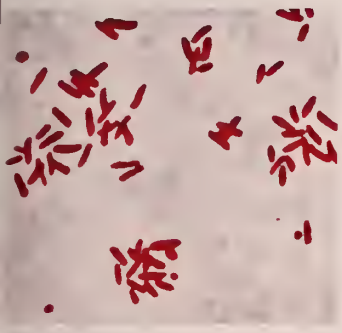


Artist's rendition of bladder with acute cystitis

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Trauma Course Set for May

A postgraduate course on Fractures and Other Trauma will be presented May 10-13, 1972, at the Sheraton-Chicago Hotel, Chicago, by the Chicago Committee on Trauma of the American College of Surgeons.

The faculty will consist of 32 scheduled speakers and will be headed by Dr. Walter P. Blount, Emeritus Professor of Orthopaedic Surgery, Medical School of Wisconsin, Milwaukee. He is a past president of the American Academy of Orthopaedic Surgeons and author of "Fractures in Children," of which a new edition is about to be released.

Other featured speakers include Drs. Richard E. King, Atlanta; James W. Harkess, Louisville, Ky.; William H. Blodgett, Detroit; Charles R. Ashworth, Los Angeles; Basil A. Pruitt, San Antonio; John A. Moncrief, Charleston, S. C.; and William Mills, Anchorage. The remainder of the faculty includes men who are affiliated with the six medical schools in Chicago.

The program is intended for all who care for injured patients and is acceptable for 28 elective hours by the American Academy of Family Practice. Even though the emphasis is on orthopaedic surgery, there are subjects pertinent to general surgery, thoracic surgery, maxillofacial and plastic surgery, and hand surgery.

A special panel on the delivery of emergency medical care will be moderated by Dr. George Anast. Another panel on thermal injuries will be headed by Dr. John A. Boswick.

One evening session will coincide with the monthly hospital meeting of the committee. It will be held at Michael Reese Hospital, and will feature problem cases in patient management. On another evening, a joint meeting with the Chicago Orthopaedic Society is scheduled. On Saturday morning, the Orthopaedic Staff of the Abraham Lincoln School of Medicine, University of Illinois, will present a clinical conference.

For registration send $125 to the American College of Surgeons, 55 East Erie Street, Chicago, Ill. 60611. For interns, residents, and allied health personnel registration is $30. Covered in this fee is the Chairman's Reception and three luncheons. If registration is accomplished by Feb. 15, 1972, a $10.00 reduction is allowed.

Co-chairmen for the course are Drs. James P. Ahstrom, Jr., and Ralph T. Lidge. The chairman of the Chicago Committee on Trauma is Dr. Colman J. O'Neill, and the secretary-treasurer is Dr. James F. Kurtz.

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JOURNAL of the Mississippi
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CONTENTS

ORIGINAL PAPERS

New Developments in the Management of Neck and Back Pain Problems — 39 — BERNARD S. PATRICK, M.D.

Hodgkin's Disease—A Curable Malignancy — 45 — FRANCIS S. MORRISON, M.D., WILLIAM T. TATUM, JR., BERNARD J. DREILING, M.D., and MARTIN H. STEINBERG, M.D.

Maternal Mortality in Mississippi: A 13-Year Report 1957-1969 — 48 — WILLIAM B. WIENER, M.D.

SPECIAL ARTICLE

Radiologic Seminar Unfused Odontoid — 56 — W. L. RONE, M.D.

EDITORIALS

Abortion: Legal Morass of American Jurisprudence — 59 — High Court Must Act

The Laws Are Passed at Home — 61 — M.D.-Solon Communication

A New, Private Look for CHAMPUS — 62 — All in Private Sector

No-fault Coverage Offers Promise — 62 — Stop Insuring Lawyers

Assault on Antisubstitution — 63 — Only M.D.s Prescribe

THIS MONTH

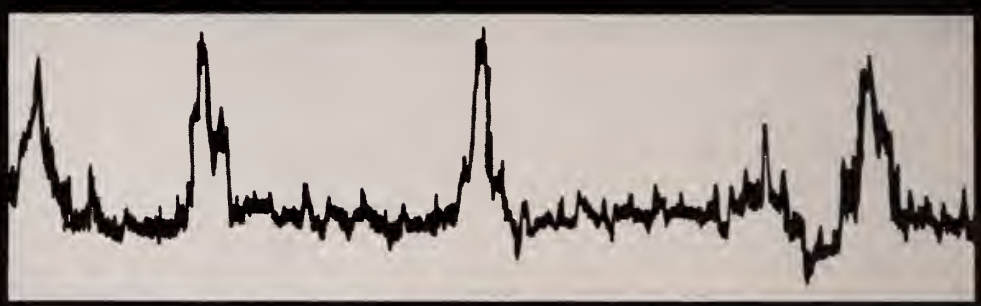
The President Speaking — 58 — 'Constructive Communication'

Medical Organization — 71 — Sniffles, Aches, Heart Episodes Mark Entry of EMCU Into Eighth Year

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An intestinal autobiography of rage contentment and horror

"Feeling unfairly taxed by the government (Internal Revenue Service) and not given enough attention by A.U.O. [an experimenter to whom the subject became very attached], he became overtly critical and accusatory. He shouted, raged, and threatened to quit."*



"The motility that day was quiet. This type of recording is seen regularly when he is relaxed and contented and the laboratory seems peaceful."*



He was overwhelmed by "paralyzing horror" when told he would need a partial laryngectomy for removal of an early carcinoma; "...the activity of the ileum virtually ceased for over a five-minute period...."*



Background

*Data presented here derive from a 13-year ongoing study by Henry Harrison Sadler, M.D., and Aline Underhill Orten, Ph.D., at Wayne State University. Their findings, which demonstrate a correlation between the emotional state of a human subject and the motility of an isolated segment of his ileum, were published in the April, 1968, *American Journal of Psychiatry*, volume 124, page 1375.

The subject is a 56-year-old man with a 40 Thiry loop of ileum created as a result of emergency surgery. A person of modest attainment and simple tastes, the subject depends on the investigators as he might h own family. His full-time job is as a "huma laboratory," and throughout the 13-year pe of the study, he has taken great personal p in his own participation.

A story charged with emotion

The graphs on the facing page are intestinal motility readings on a human subject experiencing the emotions of rage, contentment and horror (see "Background" below left). This "intestinal autobiography" dramatizes the point that certain emotions correlate with specific patterns of G.I. motility.

The visceral clutch and functional G.I. disorders

The gut response to stress has been amply demonstrated in many functional G.I. disorders. Nervous diarrhea and irritable colon syndrome, for example, are disorders associated with abnormal G.I. motility. And these disorders are commonest among patients sensitive to life-stress situations productive of conflict and excessive anxiety.

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Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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NEWSLETTER

February 1972

Dear Doctor:

Ban slapped on hexachlorophene (HCP) by FDA is stirring controversy of major dimension, and consequences of order are raising questions. FDA Commissioner Charles C. Edwards concedes that he has no evidence of HCP harm to humans when used as recommended. Discontinuation of HCP use in hospital nurseries has already been followed by outbreaks of staph, and one infant death has been reported in Florida.

> Sterling Drug and pharmaceutical industry call FDA action premature and illogical. Evidence on hazard to newborn was based on experiments with baby monkeys bathed with pHisoHex for 90 days. Product has been in wide usage in medicine for 22 years without having been questioned.

HEW will conduct examinations of about 440 Mississippians age 1-74 in Lamar and Marion counties in new health and nutrition survey. Project will consist of physical exam and extensive lab work on examinees for sampling entire U.S. population. HEW says uniform statistical data will be collected from 64 locations in nation.

Phase II regulations restrict increases in MD fees to 2.5 per cent annually and must be cost-justified in increased overhead expenses. Despite AMA protests of pennies for MDs as discriminatory, nothing has been done about AFL-CIO's giving President George Meany raise to $90,000 per year from $70,000 - during freeze.

Louisiana Health Officer Andrew Hedmeg has closed Lake Borgne to oystermen because of extensive pollution. Order said action was necessary to protect industry, since ban on all Bayou State oysters could be instituted by federal authorities. Closure of St. Bernard Parish lake will cost oystermen $15 million in lost revenues.

Federal government is having second thoughts about restrictive Rx formularies instituted for Medicaid. New guides urge states to relax inflexible formularies which restrict M.D. prerogative, conceding that rules become quickly outdated. Guides also recognize generic issue which circumscribes physician prescribing judgments.

Sincerely,

Rowland B. Kennedy
Executive Secretary

ACP Slates Clinical Disease Course

The American College of Physicians will present a course on the physiological basis of clinical disease Mar. 6-9, 1972, at the Children's Medical Center Auditorium of the University of Texas Southwestern Medical School in Dallas.

Dr. Donald W. Seldin is director and co-director is Dr. Marvin D. Siperstein. A credit of 20½ hours is allowed toward the AMA "Physicians' Recognition Award."

This course is designed to provide an understanding of the basic physiologic concepts of disease and the practical application of these concepts to the understanding of clinical disorders of man.

The pathophysiology of such diseases as hypertension, diabetes mellitus, pulmonary disorders, cardiovascular disease, disorders of the immunologic system, and liver diseases and gastroenterologic derangements will be examined in detail.

Tuition for ACP members is $80, for non-members, $125 and for residents and fellows in training, $80.

For further information write the Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Maxillofacial Trauma Seminar Set

The Department of Otolaryngology and Maxillofacial Surgery of the University of Cincinnati Medical Center will host a seminar on maxillofacial trauma Mar. 13-16, 1972.

Sponsored by the American Academy of Facial Plastic and Reconstructive Surgery, the course is a practical workshop in the treatment of maxillofacial fractures, including dissection of laboratory specimens.

Tuition is $400. For further information, write the Registrar, Miss Debby Adkins, Office of CONMED, Room 114, College of Medicine, University of Cincinnati, Cincinnati, Ohio 45219.

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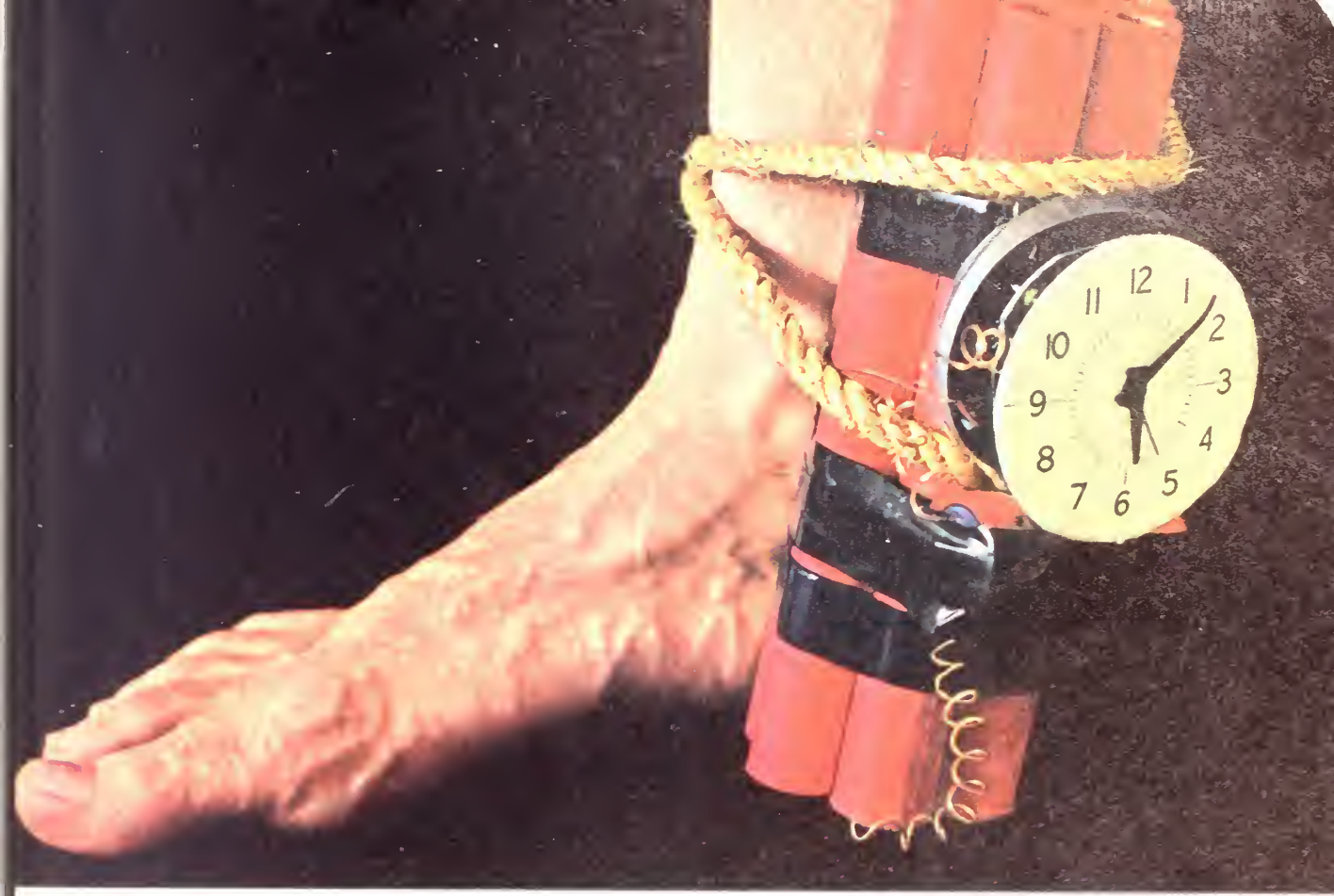


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For the skeletal muscle spasm of back sprains, Valium® (diazepam) can be a valuable adjunct. A dose of 2-10 mg, three or four times a day, goes to work to help break up the cycle of spasm/pain/spasm. The resultant relief of skeletal muscle spasm may permit greater mobilization of the affected muscles and may help the patient resume usual activities sooner than otherwise possible.



Paraspinal muscle mass frequently vulnerable to this type of trauma.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Dial Free for Tax Assistance

Faster and more convenient tax service is now available to Mississippi taxpayers through expansion of the IRS telephone assistance, it was announced by John W. Henderson, district director of Internal Revenue Service.

The expanded telephone assistance went into effect Jan. 3. It will enable taxpayers anywhere in Mississippi to reach an office of Internal Revenue Service by simply placing a local, or a toll free, phone call any time during normal business hours. Previously, some taxpayers could reach IRS only on certain days or by paying for a toll call.

The number to call for taxpayer assistance and information in Jackson is 948-4500, in Gulfport is 896-6900, in Hattiesburg is 583-4371, and in Meridian is 693-1788.

For the rest of Mississippi the number is 1-800-222-8070. Dialing the local number in Jackson, Gulfport, Hattiesburg, and Meridian will place the taxpayer in contact with a Taxpayer Service Representative in these respective offices. By dialing the toll free number 1-800-222-8070, the caller will be placed in contact with a Taxpayer Service Representative in the Jackson district office. The Jackson office is open Monday through Friday, from 8:00 a.m. to 4:45 p.m.

The expanded service will enable taxpayers to be as close to the Internal Revenue Service as their telephone. They will be able to take care of tax matters that formerly required a toll charge or a visit to IRS. For instance, a taxpayer with a question about a tax bill or notice may now be able to get the answer by telephone.

The expanded telephone service will not only be more convenient, but will also be more helpful. By concentrating phone service facilities and personnel in one location, IRS can give more effective and responsive attention to taxpayer inquiries. A matter that formerly required a letter or a personal visit can now in many instances be handled during the course of a phone call.

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Walter Birnbaum, M.D., San Francisco, Calif.—*Colon & Rectal Surgery*
Richard Winkelmann, M.D., Rochester, Minn.—*Dermatology*
H. Worth Boyce, Jr., M.D., Washington, D.C.—*Gastroenterology*
J. Jerome Wildgen, M.D., Kalispell, Mont.—*General Practice*
William A. Little, M.D., Miami, Fla.—*Gynecology*
Sol Sherry, M.D., Philadelphia, Pa.—*Internal Medicine*
Noble Fowler, M.D., Cincinnati, Ohio—*Internal Medicine*
Frank H. Mayfield, M.D., Cincinnati, Ohio—*Neurosurgery*
C. D. Christian, M.D., Ph.D., Tucson, Ariz.—*Obstetrics*
Roderick Macdonald, Jr., M.D., Louisville, Ky.—*Ophthalmology*
J. T. Hartman, M.D., Lubbock, Tex.—*Orthopedic Surgery*
Robert B. Lewy, Jr., M.D., Chicago, Ill.—*Otholaryngology*
John Bernard Henry, M.D., Syracuse, N.Y.—*Pathology*
Arnold P. Gold, M.D., New York, N.Y.—*Pediatrics*
George N. Stein, M.D., Philadelphia, Pa.—*Radiology*
W. Gerald Austen, M.D., Boston, Mass.—*Surgery*
John E. Hoopes, M.D., Baltimore, Md.—*Surgery*
Harry M. Spence, M.D., Dallas, Tex.—*Urology*

Pre-meeting Symposium by Lederle March 5
"Our Polluted Environment—Its Problems for the Clinician"

***Clinicopathologic conference *Luncheons *Medical motion pictures *Technical Exhibits *Entertainment for wives**

This program is acceptable for twenty-two (22) prescribed hours and eight (8) elective hours by The American Academy of Family Physicians.

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NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

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Complete literature available on request from Professional Services Dept. PML.

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DATELINE

Surgeons Give Peer Review Endorsement

Chicago - An overwhelming 73 per cent of 15,500 American College of Surgeons Fellows endorsed peer review as necessary for care quality improvement and costs control. About 70 per cent favor a national relative value index, but 82 per cent oppose national fixed fee scales. Other findings included regional coordination to prevent expensive equipment duplication in hospitals and Medicredit support.

1972 MECO Program Is Launched

Jackson - Implementation of the 1972 MECO summer extern program in Mississippi hospitals is under way with positive response from 40 institutions. Project, jointly sponsored by state medical and hospital associations with UMC chapter of SAMA, is working with administrators and chiefs of staff. Goal is to get 80 externs working in summer program which extends education of medical students in for-real clinical settings.

Union Label Goes on Health Services

Sacramento - Labor union contracts with allied health professionals will henceforth leave an imprint on professional services in California. International Jewelry Workers locals of dental technicians will put IJWU label on dentures which can't be chewed or worn off. Some wags suggest that action will preclude union jurisdictional disputes with steelworkers' potential claims on "bridgework."

Vote Power Wins Pledges to Elderly

Washington - Conciliatory actions by government during recent White House Conference on Aging proves ballot box power of senior citizens. The 20-plus million over 65 accounted for 17 per cent of votes in 1970 off-year elections. Commitments to elderly include $5,100 tax exemptions, free Medicare Part B premiums, relief on property taxes, and increases in federally funded programs for senior citizens.

Jury Awards $1.9 Million for Bad IV

Sacramento, Calif. - A record award jury of $1.9 million went to widowed husband and children of a woman whose death was tied to contaminated IV solution. In settlement talks, husband asked $600,000 but defendant turned him down and case went to trial. Jury gave $900,000 in general damages, $1,000 special damages, and $1 million punitive award. Citation is Priolo v. Baxter, Calif. Sup. Ct., Docket 187882, 1971.

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Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures neces
for optimal control with insulin are also necessary with Orin
The patient on Orinase must be fully instructed: about
nature of his disease; how to prevent and detect complicati
how to control his condition; not to neglect dietary restricti
develop a careless attitude or disregard instructions relativ
body weight, exercise, personal hygiene, and avoidance of
fection; how to recognize and counteract impending hypo
cemia; how and when to test for glycosuria and ketonuria;
to use insulin; and to report to the physician immediately i
does not feel as well as usual.

Caution, very close observation, and careful adjustmen
dose are necessary when: insulin is withdrawn during the
period in order to avoid ketosis, acidosis, and coma; thia
diuretics are administered which may result in aggravatio
diabetic state and increased tolbutamide requirement, te
rary loss of control, or even secondary failure; treating pati
with impaired hepatic and/or renal function and debilitated,
nourished, or semistarved patients in order to avoid severe h
glycemia which may require corrective therapy over sev
days; and treating patients with severe trauma, infection, or
gical procedures where temporary return to insulin or addi
of insulin may be necessary. Response to tolbutamide is di
ished in patients receiving therapy with beta blocking age

As some diabetics are not suitable candidates, it is esse
that the physician familiarize himself with the indications, li
of application, and selection of patients for therapy.

Patients must be under continuous medical supervision,
during the initial test period should communicate with the ph

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If you're around 40 or 45, you've obably had quite a bit of clinical experience th Orinase.

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And that means you know quite a about it.

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an daily, and during the first month report at least once weekly r physical examination and definitive evaluation. After a month, aminations are recommended monthly or as indicated. Ap-arance of ketonuria, increase in glycosuria, unsatisfactory wering or persistent elevation of blood sugar, or failure to tain and hold clinical improvement indicate nonresponsive-ss to Orinase (tolbutamide). Orinase does not obviate need for aintaining standard diet regulation. Uncooperative patients ould be considered unsuitable for therapy. Prescriptions should refilled only on specific instruction of physician. In treating ld asymptomatic diabetic patients with abnormal glucose erance, glucose tolerance tests should be obtained at three- six-month intervals. Orinase is not an oral insulin or a substi-e for insulin and must not be used as sole therapy in juvenile abetes or in diabetes complicated by acidosis or coma where sulin is indispensable.

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
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ORIGINAL PAPERS

New Developments in the Management of Neck and Back Pain Problems

BERNARD S. PATRICK, M.D.
Jackson, Mississippi

The author details the mechanisms and history of management of neck and back pain problems and describes the advances of the last 50 years. The two methods of anterior cervical interbody fusion, lumbar discography, and chemo-nucleolysis by the enzyme chymopapain as substantial advances in the management of disc-joint problems are discussed at length.

OF THE PLAGUES of mankind, the failing of the cervical and lumbar intervertebral discs is one. That these structures are so constituted to begin to fail by the time man has lived only half his life still remains a mystery. Therefore, until the means of preventing this seemingly premature breakdown or wearing out of these structural components of the spine is discovered, one must continue to deal with the problems brought about by this breakdown and deterioration by whatever means are available. The solution of prolonging the healthy life of the intervertebral disc, and thus the vertebral spine, if found at all, will likely come from the efforts of the biochemists and physiologists, whereas improvements and refinements in treatment of the disorders resulting from the breakdown of these structures lie in the hands of the clinician.

A great step forward took place when in the late 1920's and early 1930's rupture of the intervertebral disc became established as the primary underlying cause of the large majority of cases of lumbago and sciatica.[6, 11] By the late 1930's the clinical syndromes of ruptured lumbar discs were becoming established and by the mid-1940's similar syndromes were being clarified in the cervical region.[12] The use of Lipiodol* in the 1930's followed by the development of Pantopaque† in 1942 gave dramatic assistance in the diagnosis and localization of ruptured discs.[19] As a result, many patients were benefited or relieved of a disabling pain problem by the judicious use of surgery when indicated. However, a substantial and discouraging percentage of those operated on for disc problems failed to achieve a good recovery. In addition, numbers of patients went wanting for definitive surgical treatment simply because diagnostic techniques or acumen were inadequate to clarify a diagnosis sufficiently to justify surgical in-

Presented before the Section on Surgery, Mississippi State Medical Association, Biloxi, May 4, 1971.
From the Division of Neurosurgery, University of Mississippi School of Medicine, Jackson.

* Lipiodol, Fougera and Company, Inc.—brand of iodized poppyseed oil.
† Pantopaque, Lafayette Pharmacal Inc.—brand of iophendylate.

tervention. When diagnostic efforts were sufficient, so often techniques of treatment, surgical or otherwise, were inadequate to bring about relief.

Since the development of Pantopaque,† further developments and improvements in the management of discogenic neck and back pain have occurred. These advances have been evolving slowly over some 20 years though they have become generally known only during recent years.

INTERBODY FUSION

The development of the anterior approach to the surgical treatment of disorders related to the cervical discs has been a noteworthy advancement.[4] Along with development of this surgical approach came further understanding and clarification of the nature of neck pain, shoulder pain, and arm pain as related to cervical disc disorders. An understanding of the difference between discogenic neck-shoulder pain and neuralgic arm pain is needed before the significance of this new operative approach can be fully appreciated.

It has been shown experimentally while performing surgery under local anesthesia that pressure or irritation of the nerve root itself creates pain that is felt primarily in the arm, forearm, or hand. This pain is felt below the shoulder joint and not primarily in the scapula or neck. However, pressure or stimulation of the posterior longitudinal ligament or the lateral portion of the annulus fibrosus produces pain felt either in the mid-line over the upper thoracic spines or along the medial border of the scapula or suprascapular region.[2] When the annulus fibrosus is stimulated from the anterior or anterolateral aspect, pain is experienced in the same referred areas as with posterior stimulation. Pain is not felt at the point of stimulation but is felt only in the so-called referred areas. In short, stimulation (or irritation) of the disc and its adjacent structures, excluding the nerve root, produces pain felt over the posterior spines a few segments below the segment of stimulation or over the scapula on the related side. Stimulation of the nerve root produces pain primarily in the upper arm or forearm and hand (see Figure 1).

In the standard surgical approach to a ruptured cervical disc, the disc is approached from the posterior aspect by cutting away portions of the cervical lamina to expose the lateral dural edge and nerve root. The dura is then retracted medially or the nerve root is retracted superiorly or inferiorly as indicated to expose the underlying protruding disc. This permits the removal of the protruding portion of the disc and often gives just enough room to permit curetting a portion of the posterolateral bony spur, if such exists. This procedure has been generally successful in relieving nerve root compression, thus relieving pain, numbness and weakness in the arm. This procedure, however, does not correct all factors which produce disc-joint pain, felt between or alongside the shoulder blades. Therefore, the standard operation, though often giving very satisfactory relief, at times is found wanting when neck and scapular pain constitute a strong component of the patient's complaints.

The anterior approach, however, permits an equally good or better decompression of the affected nerve root and at the same time tends to put an end to the disc-joint pain which so often persists after cervical disc surgery by the standard technique. The anterior approach in fact affords a means of treating severe or disabling neck pain in the absence of a definitive pinched nerve (nerve root compression) syndrome. Formerly patients whose pain was in the neck and scapula could be offered only conservative means of management such as traction, collar and time. With the anterior approach, however, such patients who do not recover on conservative management have available more definitive means of relief.

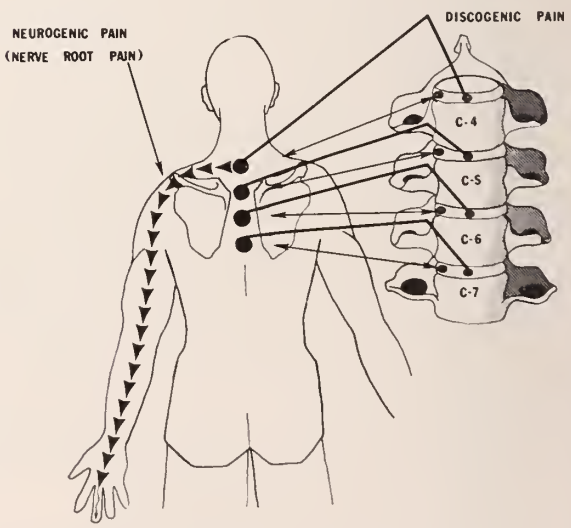


Figure 1. Discogenic and neurogenic pain of cervical origin.

There are currently two methods being used for the anterior approach. One is the Smith-Robinson technique[13] in which the vertebra is exposed from the anterior approach and the disc is curetted from the interspace in its entirety. The interspace is then spread open by special retractors

for further curettement following which a bone wafer or disc taken from the iliac crest is inserted in place of the cartilaginous disc. This bone disc is prepared a little wider than the former width of the disc space requiring gentle tapping with a light mallet to drive it into position after which the joint is immediately internally fixed or made rigid requiring no additional support (see Figure 2).

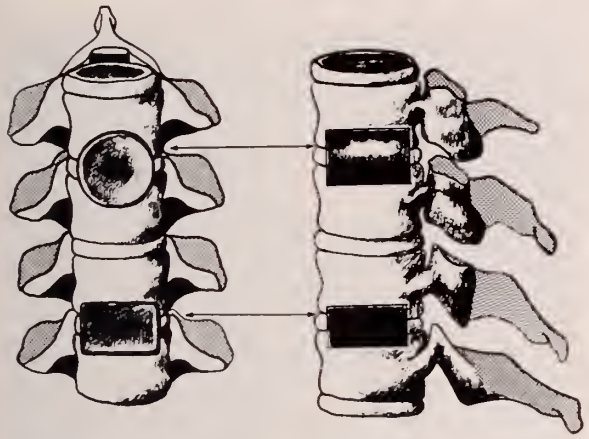


Figure 2. Cloward (dowel) vs. Smith-Robinson (rectangular) technique.

The other method was devised by Cloward[4] in which a one-half inch hole, centered over the disc space, is drilled from the anterior approach. This removes the disc as well as some bone from the upper and lower adjacent vertebra. After all cartilaginous material has been further curetted away and the nerve roots or spinal cord effectively decompressed, a bone dowel, taken from the iliac crest and constructed slightly larger than the hole, is gently tapped and driven into the prepared hole after it has been further widened by the special spreaders. This also results in immediate internal fixation of the joint and requires no further bracing (see Figure 2).

The fusion of the joint by either technique usually takes from four to six months. However most patients are free of their former pain the day following surgery and many are able to return to their jobs within two to three weeks if their work is not heavy.

These techniques result in a high degree of success. The major problem of the anterior approach involves correct identification of the joint or joints from which the trouble arises. Infection, failure of fusion, and extrusion of the bone plug have been rare.

The anterior approach has also been effective in decompressing the spinal cord from compression by either large central extruded discs or chronic transverse osteo-arthritic spurs or bars. Both of these are capable of causing chronic progressive spasticity in the legs with atrophy in the arms and hands. However, when three or more joints are simultaneously involved with spondylosis or cervical cord compression, the posterior decompressive laminectomy approach is still preferred in order to avoid excessively immobilizing the neck. Also, removing three or four transverse bars and fusing three or four joints in the neck requires a longer procedure than the standard decompressive laminectomy from the posterior approach.

The anterior cervical interbody fusion has been most dramatically successful in those circumstances of neck fracture in which there is no significant or great neurological impairment but sufficient instability of the fractured vertebra as to require cervical traction in Crutchfield tongs.[3] In the past this type of injury has generally meant six weeks in bed in traction, with Crutchfield tongs, followed by several weeks or months of cervical bracing while ambulatory. Today, with similar circumstances, an anterior interbody fusion is carried out on the second or third day following injury, the patient is ambulatory the day following surgery and unless other factors prevent, can usually be permitted to return to school or limited activity some 10 days following his injury. Contrast this to hospitalization with six to eight weeks in traction. This procedure, unfortunately, is not applicable to all neck fractures but can be used in a majority of uncomplicated fractures.

LUMBAR DISCOGRAPHY

The patterns of pain and referred pain from the lumbar discs are very similar to those seen in the cervical region. Stimulation of the annulus or the longitudinal ligament produces pain felt in the lower sacrum or lateral sacro-iliac region whereas pain produced by compression or irritation of lumbar nerve roots produces pain that is almost invariably felt below the gluteal fold in the hamstrings or calf muscles. Diffuse pain and spasm in the low back classically was labeled "lumbago." When pain was sharply lateralized but still confined to the region of the sacro-iliac joint, it was often described as a "slipped sacro-iliac." When the pain was predominantly in the leg and usually associated with numbness, reflex change, or weakness, it was then spoken of as "sciatica." These pain syndromes have subsequently been found to be caused in most cases by disorders, protrusions or ruptures of the lumbar intervertebral discs. This does not mean that the disc is the sole cause of mechanical back, sacro-iliac, or leg pain, but it

is clearly intended to imply that disorders related to changes in the intervertebral discs are the most prevalent causes.

As in the case of cervical disc disorders, we have therefore two pain components arising from disorders of the lumbar discs: (1) disc-joint pain arising from the annulus, the longitudinal ligament, or the facette, being referred to the lower sacrum or sacro-iliac region and occasionally as far as the greater trochanter; and (2) neuralgia or sciatica in the leg indicating irritation or compression of one of the sciatic nerve roots (see Figure 3). Unfortunately, discrimination of two types of pain arising from the low back is not as important as in the cervical region for in the lumbar region there is not the same flexibility in choice of operative procedures. The basic operation for removal of a ruptured lumbar disc remains today essentially the same as it was in the 1930's.

Of the advancements made in the management of lumbar disc problems, there are two of significance. One is a new technique of diagnosis and the other is a quite radically new manner of treatment.

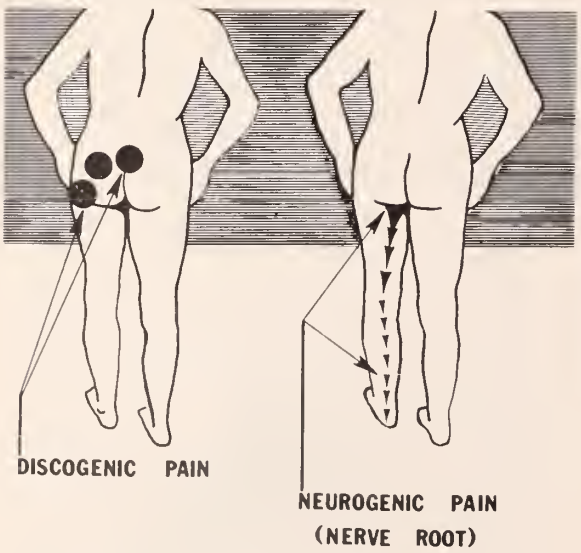


Figure 3. Discogenic and neurogenic lumbar pain.

Over the years, Pantopaque* myelography has been most useful but has been found to be dependable or accurate in only about 75 per cent of the cases of ruptured lumbar discs. Many patients in the absence of clear-cut clinical syndromes who subsequently had negative myelograms were treated conservatively for prolonged periods of time and often not operated on because of the fear on the part of the surgeon that his surgical exploration might fail to disclose the cause of the patient's pain.

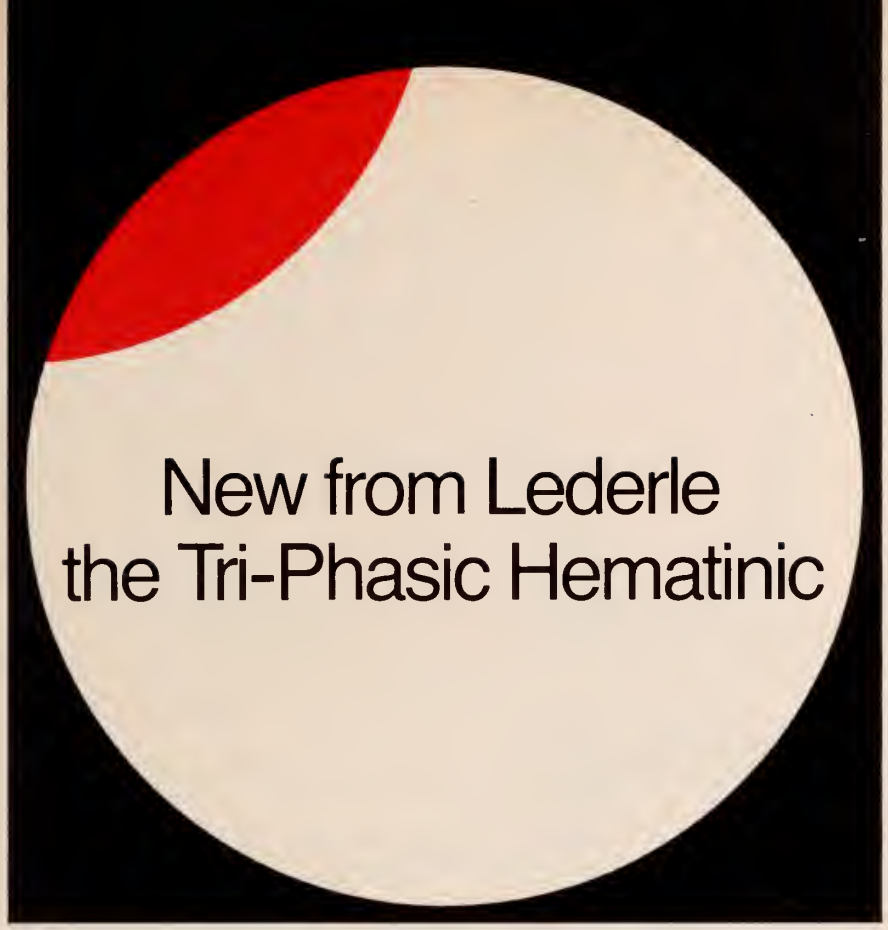
Lumbar discography offers much assistance in relieving the surgeon's uncertainty in the presence of a negative or equivocal myelogram. This diagnostic test visualizes radiographically the internal structure of the disc by injection of contrast media (Hypaque‡) directly into the nucleus pul-



Figure 4. Discogram, lateral view—posterior rupture of L5 disc.

posus[21] (see Figure 4). A discogram of the lower three lumbar discs often provides more knowledge than can be gained by surgical exploration. In certain cases the lumbar discogram provides knowledge about the status of a lumbar disc which cannot be obtained any other way. An example of this is the lateral rupture (lumbar) (see Figure 5). A lumbar discogram, if done roughly and crudely, can be quite painful, but when done gently and carefully carries with it very little discomfort. That discomfort which does appear is

‡ Hypaque, Winthrop—brand of sodium diatrizoate.



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useful in helping to identify the causative lesion as when the offending disc is injected with Hypaque,‡ there will usually be a distinct reproduction of the patient's clinical pain pattern. This pain can be controlled, abolished, or prevented by mixing Xylocaine§ with Hypaque.‡

This improved diagnostic technique should in time reflect itself in overall improved recovery rates in the management of disc disorders of the low back. However, the surgical treatment of ruptured lumbar discs still provides only 70 to 85 per cent good results following disc surgery. These figures appear fairly good but upon breaking down these statistics further, one generally finds that in men who use their backs to make a living, that is men who perform heavy strenuous labor, perhaps less than 50 per cent of this group are able to return to their former type of heavy work following lumbar disc surgery. Therefore, the results of surgery for ruptured lumbar disc may be satisfactory for some groups of patients but are certainly not for all categories. In this respect, the operation for ruptured lumbar disc is far from ideal.

Cloward, in Honolulu, advocates a primary interbody fusion done from the posterior approach at the time of first surgery for ruptured disc.[5] He reports significantly higher percentages in the heavy work category being able to return to their former work. This procedure has not gained acceptance even though seemingly it results in higher percentages of good recovery when compared to the standard procedure. Possibly it is because the operation is difficult at best and requires the availability of bank bone.

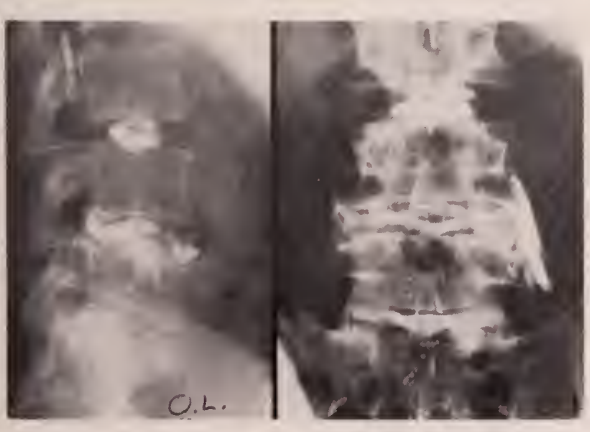


Figure 5. Lateral disc rupture of L4 disc, AP and lateral view.

In certain cases of intractable low back pain, posterior fusions are often done. These procedures also fail to relieve pain in a substantial percentage of cases. Thus the posterior fusion has not been recommended as a primary procedure for disc trouble in the low back unless there is clear-cut instability at the affected site, such as with congenital spondylolisthesis.

Since 1958 some emphasis has been placed upon performing lumbar interbody fusion from the anterior approach (trans-abdominally). This is not done or recommended as a primary procedure for ruptured disc but was thought initially to be a solution to the problem of recurring or intractable low back pain which did not respond to the usual surgical or conservative measures. However, the morbidity of this procedure plus certain complications have tended to limit its application.

CHEMO-NUCLEOLYSIS

Considering the generally unsatisfactory state of affairs relative to low back surgery, other means of effective treatment have been sought. In 1962, an orthopedic surgeon, Lyman Smith of Elgin, Ill., reported the rather specific effect of certain of the papain‖ enzymes on the nucleus pulposus.[16] With his co-workers he was able to confirm that the enzyme chymopapain tended to exert a specific lytic action on chrondromucoproteins with very little lytic action being exerted upon the fibers of the annulus fibrosus. In addition, this enzyme was found to have no effect upon the nerves themselves or their coverings. Upon injecting this enzyme into the nucleus pulposus, he was able to produce lysis and liquefaction of the nucleus pulposus generally within a few hours of the time of the injection. This was accomplished with the same technique used for performing a lumbar discogram. This enzyme proved to be capable of accomplishing chemically that which is accomplished surgically in the removal of the nucleus pulposus. Exceptions are those circumstances in which there are nuclear fragments free in the spinal canal. Because of certain controversies regarding the effect of chymopapain on the disc and adjacent dura, very little was published about this method of treatment until the past 18 months. This method is still undergoing clinical trials and chymopapain has not yet been released for use other than on an experimental basis. However to date more than 900 patients have been so treated and in the hands of almost all reporting on the subject, the results have been comparable to surgical removal, with-

§ Xylocaine, Astra Pharmaceutical—brand of lidocaine.

‖ Papain is a proteolytic enzyme extracted from the juice of the green fruit of the *Carica papaya*. Chymopapain, one of the papain enzymes, exerts a selective action chrondromucoprotein of the intervertebral disc.[1, 9, 17]

out the morbidity of surgery.[7, 8, 14, 15, 18] Extruded discs are an exception to this statement and still generally require surgical removal.

More recently another enzyme, collagenase,# has been studied for the same purpose.[10, 20] This enzyme also shows promise of being an effective method of dissolution of the nucleus pulposus. Should these enzymes or subsequent enzymes fulfill the promise held for them, we may find at our disposal a most effective means of management of many disc problems in the low back with minimal morbidity. Perhaps the next five years will answer this question.

SUMMARY

The anterior approach to cervical disc problems with interbody fusion is of significant value because it relieves neck pain (disc-joint) as well as relieving nerve root pain.

In uncomplicated cervical fractures, anterior cervical interbody fusion may reduce hospital time from six to eight weeks to seven to ten days.

Lumbar discography extends diagnosis of the cause of low back pain beyond myelography and provides a liberal education in understanding disorders of the lumbar discs. Although for satisfactory diagnosis and treatment lumbar discography is not always necessary, technically speaking the examination of a lumbar disc is incomplete without discography.

Whereas fusion of an offending lumbar disc-joint may be desirable, fusion as a routine or primary procedure for lumbar disc problems continues to remain impractical.

In the future, chemo-nucleolysis or enzyme dissolution of the nucleus pulposus may become the preferred method of treatment of discogenic pain problems which fail to respond to initial conservative management.

Although patients whose generalized degenerative and associated wear and tear changes in the back or neck have extended beyond an expectation of great improvement by surgical or other means will continue to be encountered, the recent advances in the management of disc-joint problems are very substantial and when used carefully and intelligently can afford many additional patients a means of relief. ★★★

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Collagenase is a lytic enzyme derived from *T. Clostridium Histolyticum* and has selected lytic action on collagen fibers.

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Hodgkin's Disease—A Curable Malignancy

FRANCIS S. MORRISON, M.D., WILLIAM T. TATUM, JR.,
BERNARD J. DREILING, M.D. and MARTIN H. STEINBERG, M.D.
Jackson, Mississippi

Hodgkin's disease was considered uniformly fatal until recently. Now with very intensive diagnostic and therapeutic techniques, more than 70 per cent of these patients may be cured. The authors stress that an experienced team made up of the hematologist, radiotherapist, pathologist, and surgeon should undertake the cooperative management of these patients. Clinical staging, radiotherapy, and the newer drug agents are discussed in detail.

HODGKIN'S DISEASE has been recognized and studied for over a hundred years.[1] Until quite recently, however, it has been considered uniformly fatal.[4] Fifty years ago the mean survival was 29 months after diagnosis.[7] Even the introduction of x-ray and alkylating agents did not change this appreciably. The mean survival of the evaluable cases seen at the University Medical Center in its first 15 years prior to 1970 was 37 months.[8] Traditional treatment has brought symptomatic relief but very little improvement in prognosis. As a result of work in many centers during these past 15 years, however, greater than 70 per cent of patients with this disease who receive optimal treatment may now be cured.[7]

The price of cure is the precise application of very intensive diagnostic and therapeutic techniques. This can only be accomplished in centers where an experienced team made up of the hematologist, radiotherapist, pathologist, and surgeon is involved in the cooperative management of these patients. It is only when this type of team approach is utilized that the desired cure rates are possible.[7]

The workup begins, of course, with the initial biopsy report of Hodgkin's disease. Histologic classification has been modified over the years to correlate better with mode of spread and prognosis (see Table 1). However, we are finding that several histological types may be present concurrently or at various times in the same patient.

Clinical staging of the disease has been attempted since 1911, but the best known system was evolved in the fifties and culminated at the Rye Conference in 1965.[5] Early this year in Ann Arbor, the system was again modified so as to make it even more useful as a diagnostic, therapeutic and prognostic tool (see Table 2). Patients are further classified as to the presence or absence of systemic symptoms. Class A patients are asymptomatic. Class B patients have one or more of the following symptoms: fever, night sweats or loss of greater than 10 per cent of total body weight in the six months prior to diagnosis.[7]

The placement of a patient with biopsy-proven Hodgkin's disease in the proper stage is directly related to the skill and completeness of his workup. Our present evaluation begins, of course, with a thorough history and physical exam. Special attention is paid to the extent of lymphadenopathy and the presence of hepatosplenomegaly. Hemoglobin, hematocrit, WBC and differential count, platelet count, reticulocyte count, ESR, BUN, creatinine, FBS, albumin, globulin, bilirubin, fibrinogen, alkaline phosphatase, SGOT, LDH and BSP are all obtained. Skin testing with a variety of antigens such as PPD and histoplasmin is done to evaluate delayed hypersensitivity capacity. PA

From the Division of Hematology, Department of Medicine, University of Mississippi School of Medicine, Jackson.

and lateral chest x-rays are done, with full chest tomography in selected individuals. Bilateral lower extremity lymphography, IVP and occasionally inferior venacavography are essential for determining lymph node involvement below the diaphragm. The yield of IVP alone is very small. Organ scanning with some of the more recently available radionuclides is being found helpful by some investigators.

Exploratory laparotomy now has a definite role in the staging of Hodgkin's disease. There is, however, some controversy as to which patients should be subjected to this procedure. We recommend this procedure in all cases not already known to be Stage IV. The information obtained from laparotomy depends upon the experience of the surgeon in performing this staging procedure and his zeal in searching for and obtaining adequate biopsy material.[7] The operation includes splenectomy and oophoropexy (in women of childbearing age). Lymph nodes should be biopsied from the splenic hilum, porta hepatis, celiac, mesenteric, R and L periaortic and R and L inguinal areas and silver clips placed around the node dissections. Nodes which appear abnormal on lymphography are sought and removed. A wedge and several deep needle biopsies of the liver are routinely obtained. A generous bone marrow biopsy from the iliac crest is taken and all biopsy material is examined grossly and microscopically for Hodgkin's disease.

After staging is completed, the decision as to mode of therapy can be made.

TABLE 1

HISTOLOGIC CLASSIFICATION OF HODGKIN'S DISEASE

Lukes and Butler	*Jackson and Parker*
Lymphocyte predominance	Paragranuloma
Nodular sclerosis	Granuloma
Mixed cellularity	
Lymphocyte depletion	
1. Diffuse fibrosis	Sarcoma
2. Reticular	

Early therapeutic attempts at surgical extirpation, "node chasing" with x-ray as individual nodes become enlarged, and the use of single chemotherapeutic agents are all best considered to be purely of historical interest. The cornerstone of treatment in Hodgkin's disease today is extensive radiotherapy.

The result of careful staging of many patients has shown that in all likelihood there is orderly spread of Hodgkin's disease from the area of initial involvement to predictable remote sites. Spread is primarily via lymphatic channels although there may be vascular invasion at times.[6] It has also been shown that with a tumor dose of 4400R.

TABLE 2

CLINICAL STAGING OF HODGKIN'S DISEASE

I Disease localized to a single lymph node, or single lymph node-bearing area, either above or below the diaphragm.
  IE Disease confined to a single focus in an extralymphatic organ other than liver or bone marrow.
II Disease confined to two or more lymph node bearing areas on the same side of the diaphragm.
  IIE Involvement of one or more lymph node regions on either side of the diaphragm, plus a localized solitary area of contiguous spread to an extra lymphatic organ other than liver or bone marrow.
III Disease confined to lymph nodes, but involving both sides of the diaphragm.
  IIIS Stage III with involvement of the spleen.
  IIIE Stage III with a solitary area of contiguous extralymphatic spread, other than liver or bone marrow.
  IIISE Stage IIIS plus IIIE.
IV Disease with disseminated extranodal involvement, for example to liver, lung, bone marrow, skin.

the chance of disease recurring in a treated area is less than two per cent.[3] These facts allow the radiotherapist to devise treatment ports which cover known areas of disease and also areas of likely spread, and to deliver tumoricidal doses of x-ray to these areas. Treatment is prolonged, difficult for the patient and not without hazard. Currently Stage I, IE, II, IIE, III, IIIE patients, classes A and B, receive "total nodal" irradiation with doses of about 4000R. Irradiation of the liver and combination chemotherapy is also used in Stages IIIB, IIIS, and in selected patients with Stage IV disease.

Although the results of chemotherapy in Hodgkin's disease have until recently been disappointing, the knowledge gained about available drugs has been useful. The use of single agents such as Nitrogen Mustard, Cyclophosphamide, Chlorambucil, Vinblastine, Vincristine, Procarbazine and Prednisone yields a positive response in about 60 per cent of cases, but the incidence of complete or prolonged remission is far less. The fact that there is some response to treatment with these agents led to the concept of multiple drug therapy using drugs with differing mechanisms of



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action and toxicity in an attempt to achieve maximal cell kill without prohibitive toxicity.

The most successful multiple drug regimen is the MOPP program.[2] This consists of large doses of Nitrogen Mustard, Vincristine, Procarbazine and Prednisone, given in two week courses with intervening two week rest periods, for a total of six cycles of treatment. About 80 per cent of patients with Stage IVB disease who had minimal prior treatment have achieved complete remission. The excellence of results with MOPP therapy contrasts strikingly with those of single drug treatment. MOPP therapy is currently used in certain individuals with Stage IV disease and in patients with Stage IIIB disease following radiotherapy. It is also being evaluated as an adjunct to radiotherapy in patients with I and IIB disease.[7]

The results of treatment with radiotherapy and chemotherapy in the hands of experienced individuals are good. In Stage I, IE, II and IIE patients treated with total nodal irradiation and without systemic symptoms, the five year survival rate is greater than 90 per cent. If symptoms are present the survival rate is 75 per cent. Stage III and IIIE without symptoms treated with total nodal irradiation have a five year survival of about 60 per cent. Stage IIIB patients treated with total nodal irradiation, followed by MOPP, may have an even better five year survival. Relapses after treatment seem to cluster in the first two years after therapy, after five years the relapse rate being less than five per cent with a survival curve approximating that of the general population.[3]

Hodgkin's disease is potentially curable. The chance of cure depends on precise histologic diagnosis, meticulous staging and intensive treatment. These require an integrated multidisciplinary approach to management. The effect of applying these principles to other lymphomas is as yet unknown and is presently being evaluated. Only by providing this approach can we make the benefits of recent clinical research available to our patients. ★★★

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TALK ABOUT CONFUSED!

A first grader wanted to go to the boys' room, so his teacher excused him. He returned soon, tearfully saying he couldn't find it. She let another older boy go with him. When they returned, the companion explained, "He's okay now—just had his pants on backward."

Maternal Mortality in Mississippi: A 13-Year Report 1957-1969

WILLIAM B. WIENER, M.D.
Jackson, Mississippi

A summary is presented of data obtained by the Committee on Maternal and Child Care in the first 13 years of their study of maternal deaths in Mississippi (from 1957 to 1969). The author reviews the Committee's methods of study, and the results found. He notes that a gratifying decrease in the total number of maternal deaths and in deaths from hemorrhage is observed as well as a reduction in the proportion of direct obstetric deaths and avoidable deaths. However, he points out that the management of toxemia and infection and the provision of adequate antepartal care and delivery facilities are still pressing problems in Mississippi.

When the Committee on Maternal and Child Care began its study of maternal deaths in Mississippi in 1957 it had several objectives in mind. The first was to analyze the common causes of death in the state, the second to disseminate the results of the study among physicians and hospitals, and the third to point the way for improvements in maternal care so that the number of deaths might be lessened. The first 13 years of this study have been completed, and it is now appropriate to review the committee's work, to determine how far its aims have been fulfilled and to plan its course for the future.

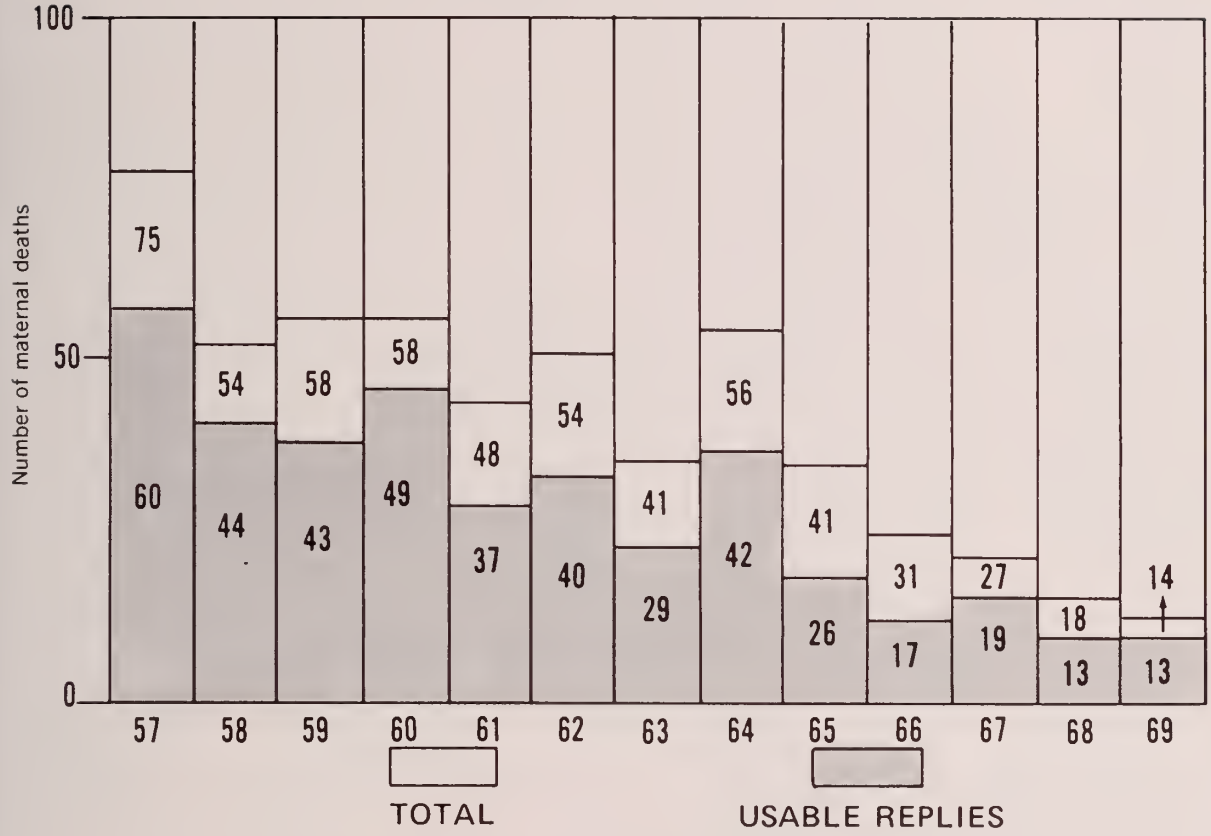
Techniques of obtaining and reviewing information on maternal deaths have not changed appreciably during the 13 years of study. The questionnaire type of inquiry has been exclusively employed. No "on the spot" investigations of hospital records or interviews of physicians or hospital personnel have been conducted except under rare circumstances involving hospitals in Jackson. The data sheet used was developed by the committee before the study began and has undergone only minor changes since then. One of the data sheets, together with a letter from the chairman of the committee, is sent to the physician who last attended the patient. He is asked to complete and return the data sheet and add any pertinent information in a supplementary note. If he does not reply, two follow-up letters are sent at appropriate intervals. Occasionally in some cases, personal attempts have been made by members of the committee, the State Board of Health, officers of the association, or local obstetricians to obtain information. Letters requesting additional information have occasionally been sent to the responding physician by the commit-

Chairman, Committee on Maternal and Child Care.
Committee members, 1957-1969—W. W. Barnard, M.D., Clarksdale; Ralph L. Brock, M.D., McComb; A. L. Gray, M.D., Jackson; Frank C. Massengill, M.D., Brookhaven; Howard A. Nelson, M.D., Greenwood; W. E. Noblin, M.D., Jackson; H. C. Ricks, Jr., M.D., Jackson; Jo N. Robinson, M.D., Columbus; Margaret P. Veller, M.D., Natchez; William B. Wiener, M.D., Jackson; Michael Newton, M.D., Jackson; George J. Nassar, M.D., Greenwood; K. Ramsey O'Neal, M.D., Hattiesburg; Wendell H. Stockton, M.D., Amory; William R. Eure, M.D., Bay Springs. Consultants—Curtis W. Caine, M.D., Jackson (Anesthesiology); Catherine G. Goetz, M.D., Jackson (Pathology); J. Manning Hudson, M.D., Jackson (Internal Medicine); Alvin E. Brent, M.D., Jackson (Internal Medicine).

TABLE 1

MATERNAL DEATHS IN MISSISSIPPI—1957-1969

Total number of cases studied



tee, if it seemed likely that he could supply further information which might be of value.

Following receipt of the data sheet and other information, all identifying marks are removed so that anonymity is preserved. A copy of the data sheet is then sent to a member of the committee for review prior to the next meeting. At the quarterly meeting of the committee the case is summarized by the member who has studied and evaluated it according to the criteria set out in the AMA "Guide for Maternal Death Studies." The evaluations are discussed by the committee, agreed to or voted on if there is a division of opinion, and finally entered in the committee's records.

DISSEMINATING INFORMATION

Several methods have been employed by the committee to spread the information obtained from their study. From time to time illustrative case reports, written by committee members, have been published in the association's JOURNAL. Annual reports have been compiled by the chairman and the central office and published in the JOURNAL. Finally, interesting cases have been presented in conjunction with the Mississippi Obstetrical and Gynecological Society at luncheons at the annual meetings of the association. As far as the individual responding physician is concerned, the committee has developed the practice of sending him a résumé of the committee's findings after the meeting at which the case has been discussed. Also, the committee findings have been presented at local medical society meetings when requested.

Maternal Deaths. In Table 1 the 527 deaths occurring during the 13 years' study are divided according to the years in which they took place. There is a decrease from 75 in 1957 to 14 in 1969. Letters and data sheets were sent out on all these cases and the total number of usable replies was 412 or 80 per cent. In Table 2 the maternal death rate per 10,000 live births is shown for each of the years studied.

All replies were evaluated according to their adequacy. This ranged from 1 (low) to 5 (high).

In order to achieve the latter rating the data sheet had to be completely filled out, a relevant explanatory note attached, and an autopsy report available. Cases rated 1 or 2 were often difficult to evaluate because of the scanty nature of the information. A distressing feature of the replies was the infrequent performance of an autopsy even when there was real question as to the cause of death or when the patient was not seen by the physician until shortly before or after death.

DIRECT OBSTETRIC DEATHS

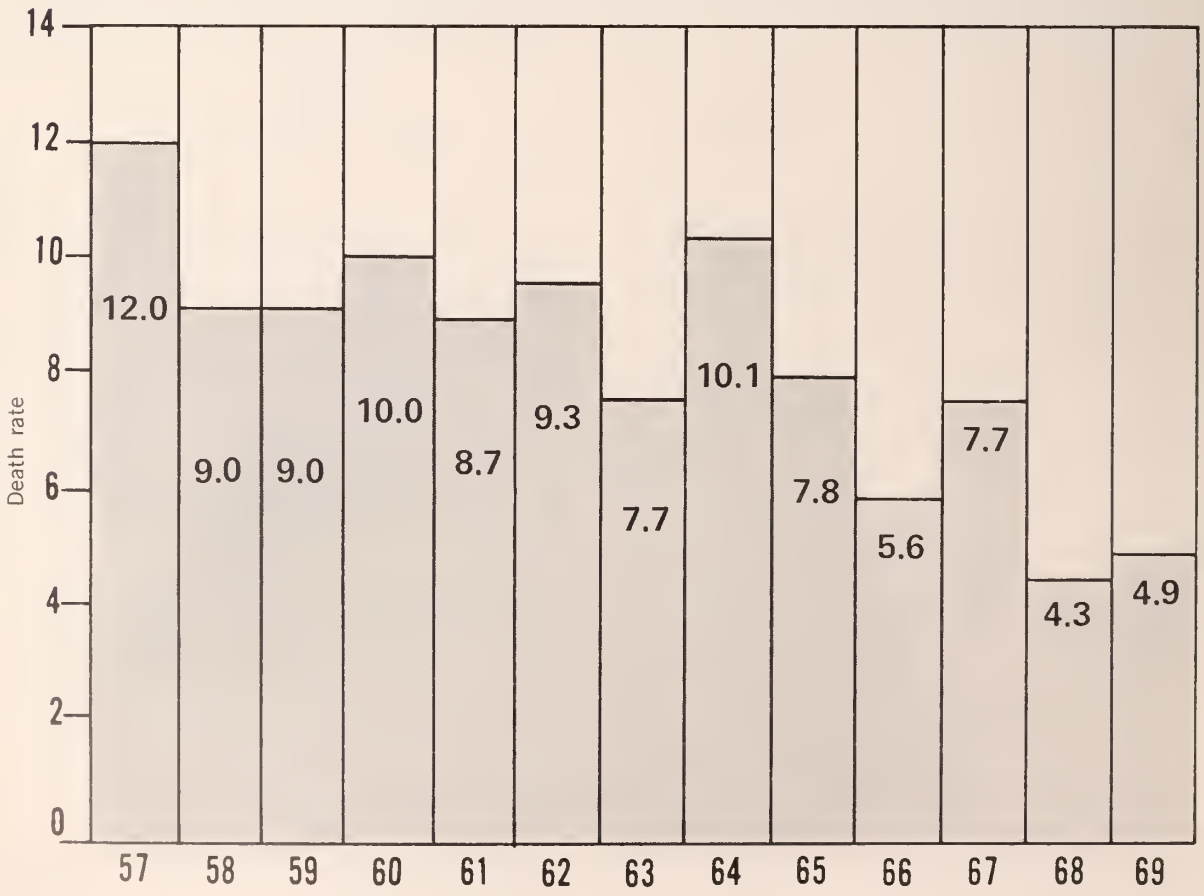
Causes of Death. Direct obstetric deaths are defined by the Guide as those in which the cause of death is due to a condition directly related to pregnancy such as hemorrhage, toxemia, infection, anesthesia, or vascular disease. Indirect obstetric deaths are those resulting from disease present before or developing during pregnancy (not a direct effect of the pregnancy), which was obviously aggravated by the physiological effects of the pregnancy and caused the death. Unrelated deaths are those in which some entirely extraneous cause, such as accident, was responsible for the death. It should be noted that no such cases are included in the committee's data. This is in part due to the fact that the standard certificate of death in the state of Mississippi does not require a statement of pregnancy if this condition was not directly involved in the patient's death.

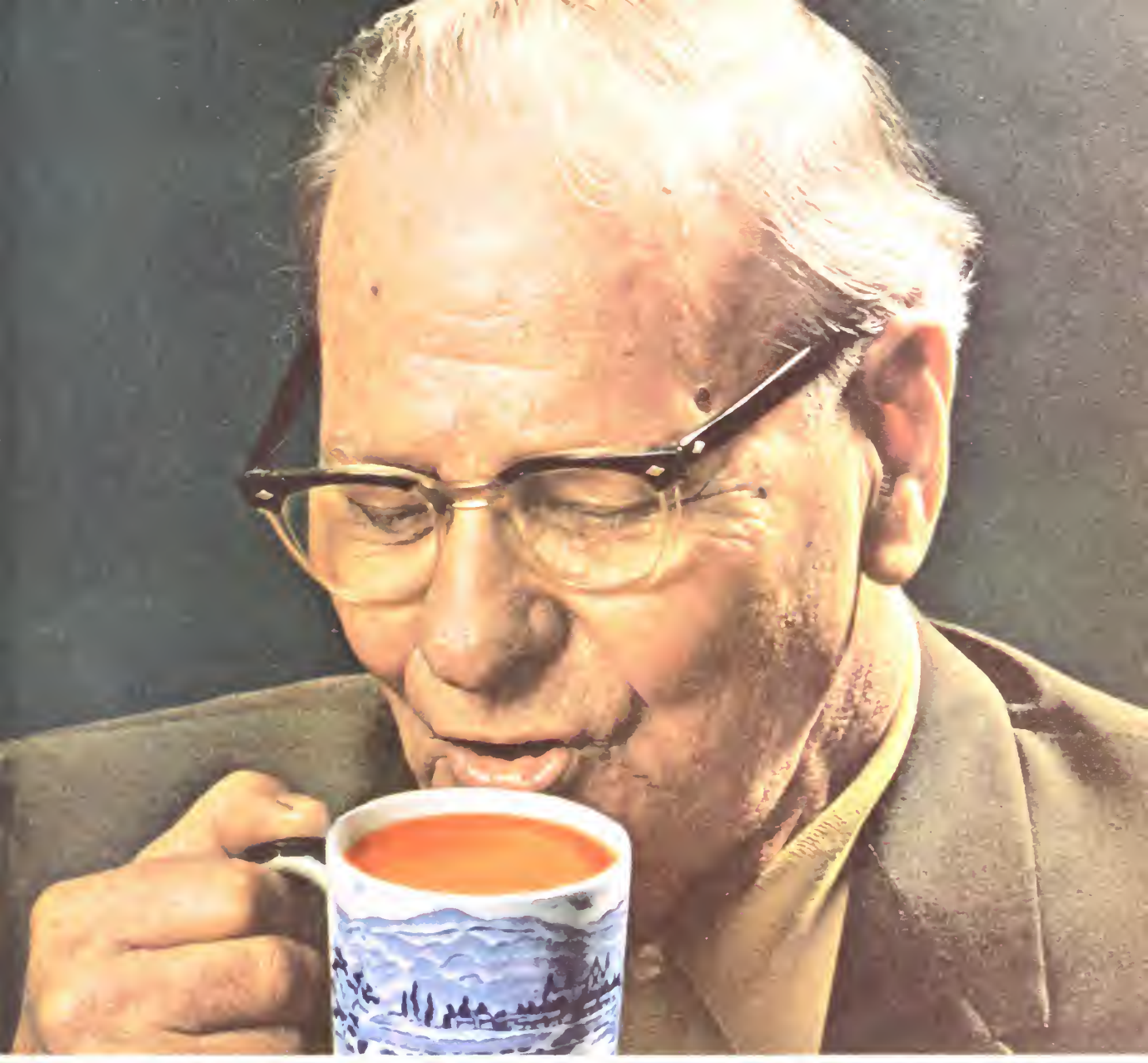
Table 3 shows irregularity but slight decline in the number of direct obstetric deaths. Of great interest is the number of deaths from specific causes, since this may indicate definite areas of concern. The changes in these are shown in Table 4. The percentage of the total number of deaths from hemorrhage has shown a sharp decline from 59.7 per cent in 1957 to 25.0 per cent in 1969. Little change is noted in the number of deaths from toxemia and infection.

In each case the committee attempts to analyze

TABLE 2

MATERNAL DEATH RATE PER 10,000 LIVE BIRTHS (MISSISSIPPI 1957-1969)





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Recommend Campbell's Soups and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

the 3 phases of Eve



women are not equal in their endogenous rmonal output. And, while all oral contraceptives : fundamentally effective, they exhibit **differences their activity levels and estrogen-progestogen ios that affect different women differently**—in th short and long-term use. Some brands ıy be insufficient for the woman's needs or else ıy exceed them.

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rences 1. Editorial Oral Contraceptives Which Pill for Which Patient? Patient Care 3:90-115) 1969 and 4:135-145 (June 15) 1970. 2. Greenblatt R B Progestational Agents in Clinical lice Med Sci 18:37-49 (May) 1967. 3. Kistner R W Gynecology Principles and Practice ed 2 ago Year Book Medical Publishers, 1971. 4. Kistner R W The Pill Facts and Fallacies About y's Oral Contraceptives, New York Delacorte Press, 1968. 5. Nelson, J H Clinical Evaluation of Effect of Current Oral Contraceptives J Reprod Med 6:50-55 (Feb) 1971. 6. Orr G W Oral estational Agents Therapy and Complications, S Dakota J Med 22:11-17 (Jan) 1969

the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

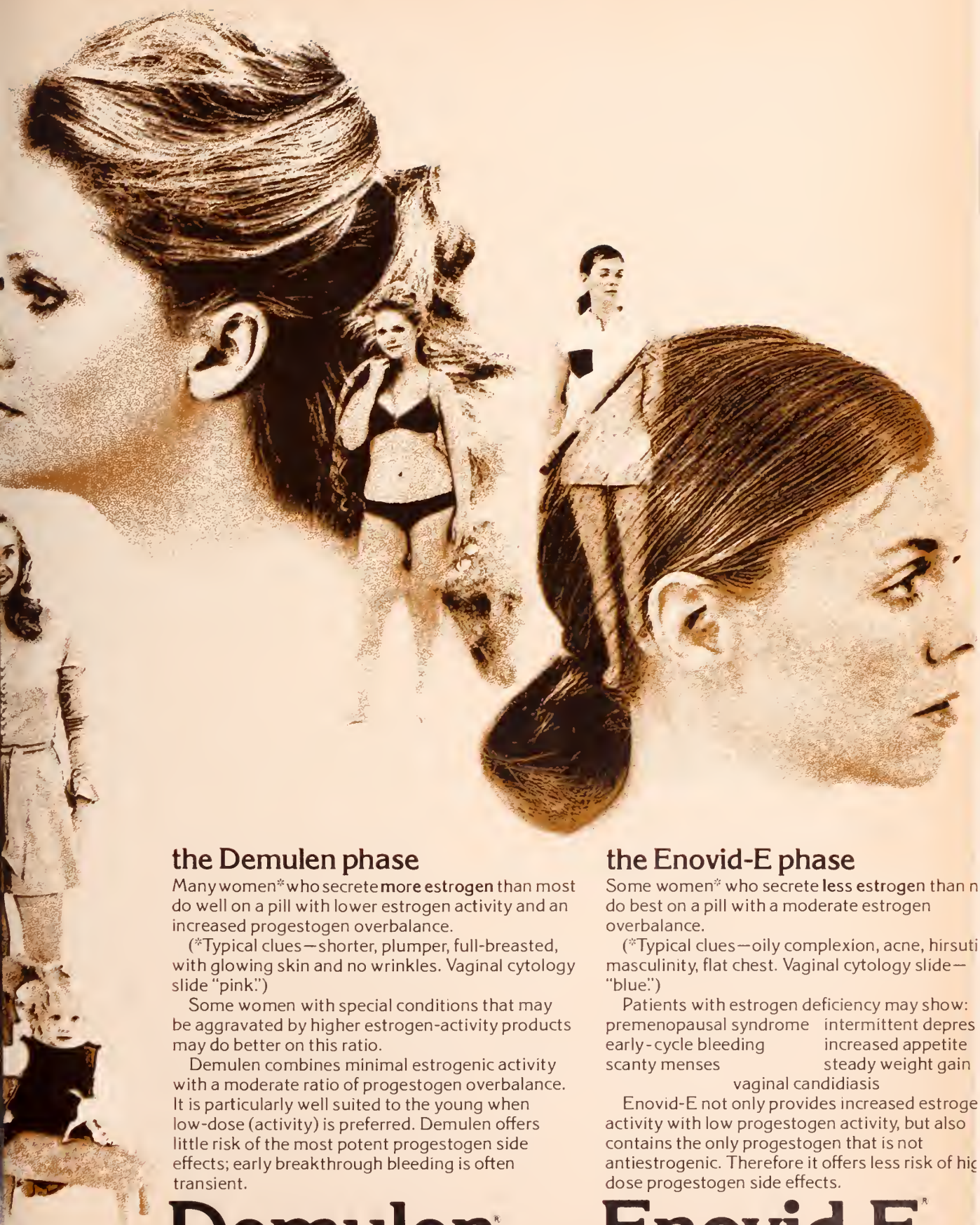
Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slight progestogen dominance. It has an excellent record of patient acceptance.

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Each white tablet contains ethynodiol diacetate 1 mg mestranol 0.1 mg

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For brief summary of prescribing informa
see following page.



the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

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Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

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Patients with estrogen deficiency may show:

premenopausal syndrome	intermittent depres
early-cycle bleeding	increased appetite
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Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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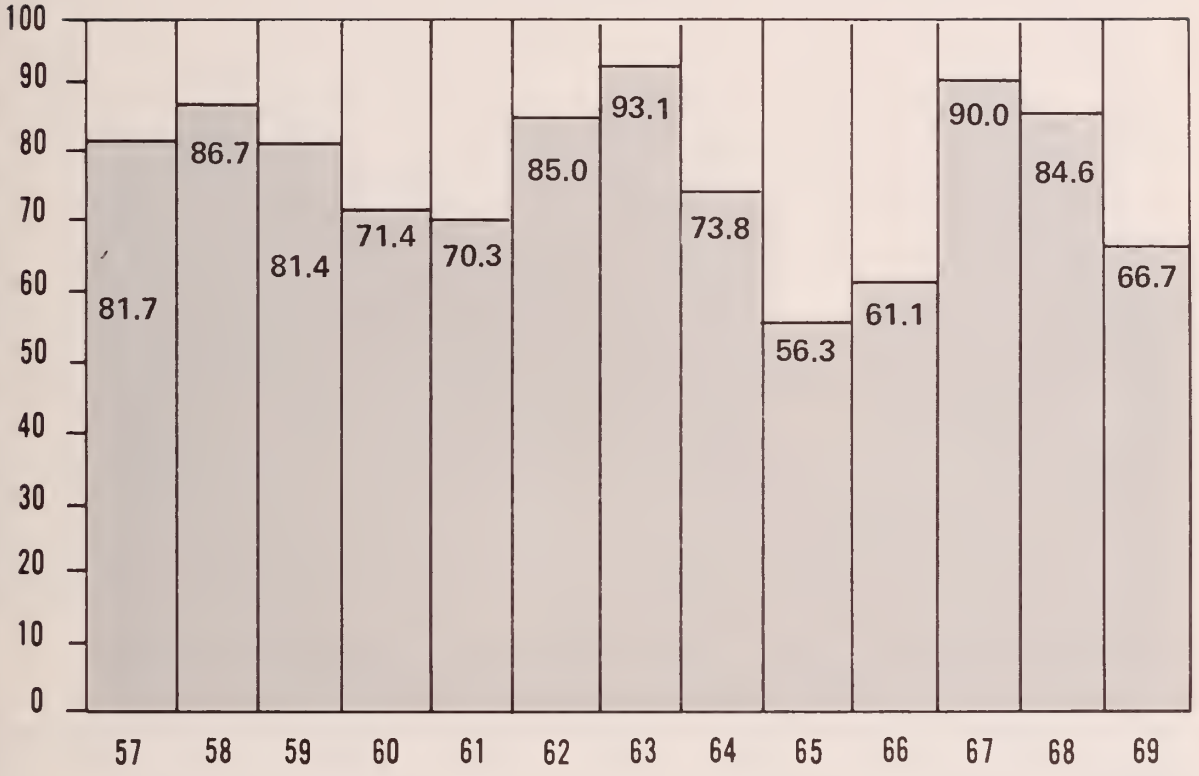
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TABLE 3

MISSISSIPPI MORTALITY IN MISSISSIPPI
1957-1969

Direct obstetrical deaths



whether under ideal circumstances of physician knowledge, hospital facilities, and patient cooperation the death could have been avoided and, if so, to identify the specific avoidable factors. A decrease in the proportion of avoidable deaths is shown over the 13 years (see Table 5).

AVOIDABLE FACTORS

Avoidable factors are arbitrarily assigned to physician, hospital, or patient. Often more than one avoidable factor is found. In general, physician factors varied according to the type of complication present. Hospital factors, which were in the minority, were generally related to failure to provide adequate amounts of blood and facilities for handling complicated obstetric problems. Although patient factors included failure to return when asked by the physician and failure to carry out the physician's instructions, by far the commonest was failure to obtain antepartal care.

The data obtained during the 13-year period has enabled the committee to draw a broad picture of the pattern of maternal deaths in Mississippi. It would perhaps have been of interest to obtain more precise information in many instances so as to assess trends more accurately and define areas of concern more carefully. However, the questionnaire method itself has some deficiencies which would to some degree have made the collection of detailed information difficult. That the committee was able to assemble as much information as it did was due to the untiring efforts of the executive office and the willing cooperation of the physicians in the state.

Several encouraging observations may be made. First, there has been a definite and gratifying decrease in the number of maternal deaths in Mississippi during the period examined. From 1957 through 1969 maternal deaths in Mississippi decreased from 75 cases to 14. Concurrently, live births recorded by the State Board of Health decreased from 60,712 to 45,719 (see Table 6). Thus, it may be seen that while the annual rate of live births decreased approximately one-third,

the maternal deaths rate decreased approximately four-fifths. The data are even more dramatic when considered in terms of maternal deaths per 10,000 live births.

Second, over the 13-year period (1957-1969) a slight but definite decrease in the number of direct obstetric deaths (most likely to be due to specific avoidable factors) and in the proportion of avoidable deaths is indicative of a general improvement in maternal care throughout the state. Third, the reduction in the percentage of the number of deaths due to hemorrhage from 59.2 per cent in 1957 to 25.0 per cent in 1969 is evidence of increasing concern among physicians and hospital administrators for improving methods of obtaining blood and giving it in sufficient quantities in emergencies.

On the other hand, it is apparent that there are several matters for concern. First, the maternal death rate for 1969—4.9 per 10,000 live births—is nearly two times the national rate of 2.9 per 10,000 live births for the same year. In large part, this was due to the non-white rate of 8.6 maternal deaths per 10,000 live births while the white rate was only 1.2.

Second, the number of deaths from toxemia has not decreased. Data sheets on these patients often reveal one of two difficulties. Either the treatment of the patient with severe preeclampsia or eclampsia was not vigorous enough, especially in the reluctance to induce labor, or convulsions or death occurred while the patient was under observation, indicating a lack of awareness on the part of hospital personnel that these patients are critically ill and require constant attention.

Third, the patient factor "did not attend for antepartal care" was frequently implicated by the committee as playing a part in the patient's death. A tremendous need exists in Mississippi to provide facilities and encourage adequate attendance for antepartal care.

Fourth, deaths not infrequently followed delivery at home by "granny" midwives with resulting complications. It is considered essential that primigravidas, women who are para 4 or more, and those with any sort of complication be delivered in a hospital under the care of a physi-

TABLE 4

MATERNAL MORTALITY IN MISSISSIPPI—1957-1969
Cause of Direct Obstetric Death

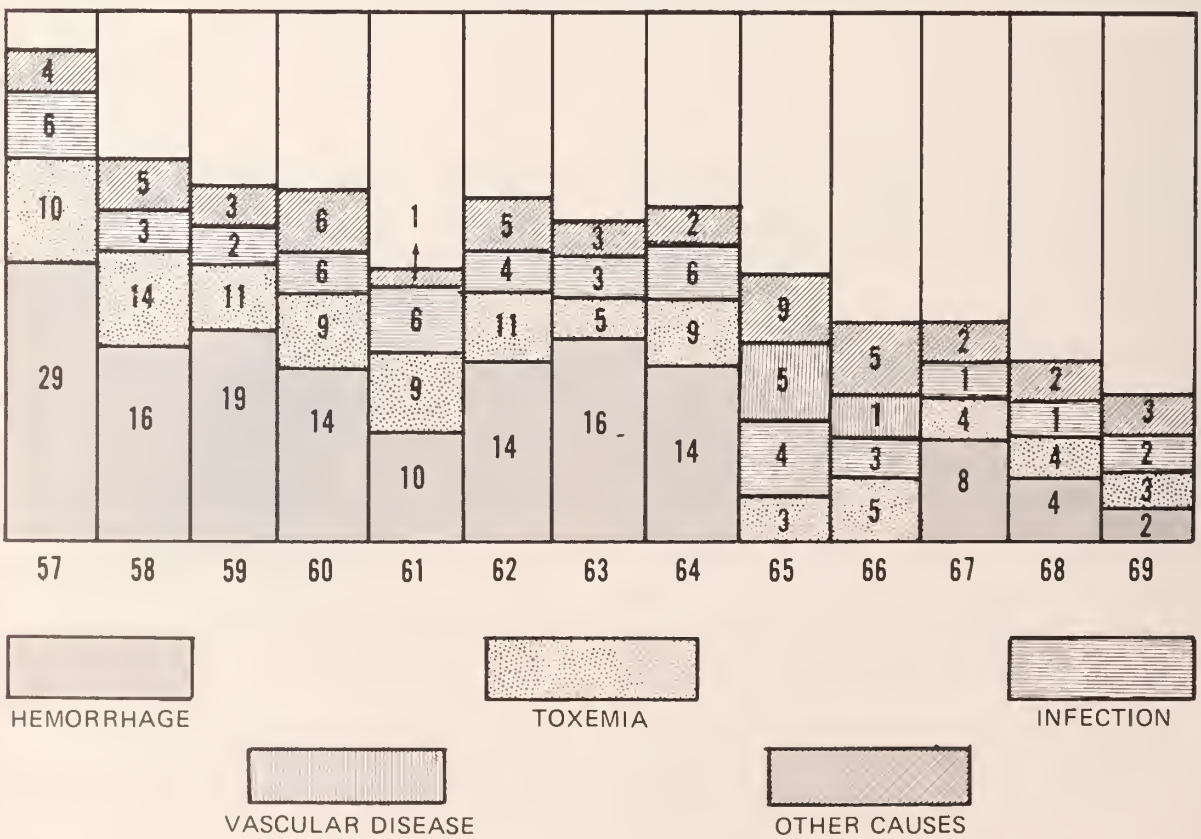
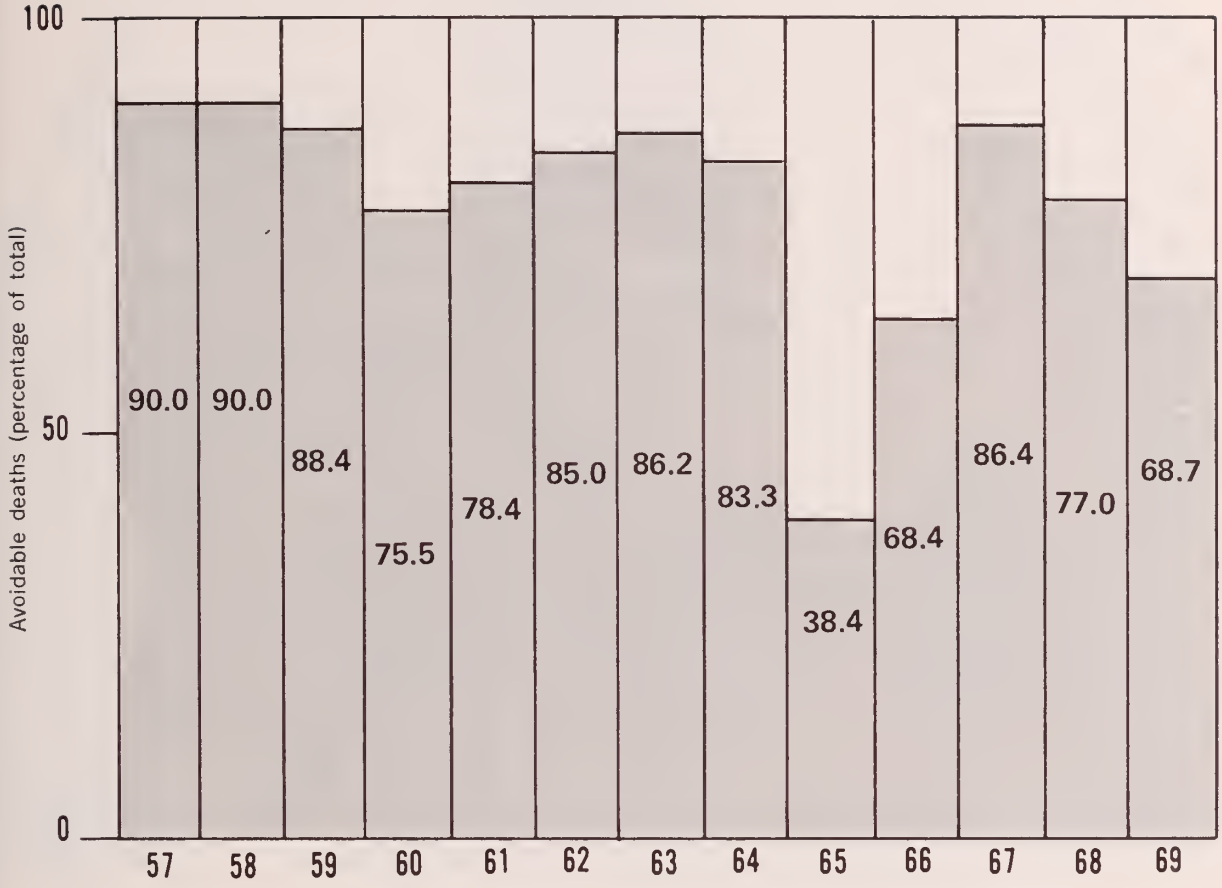


TABLE 5

MATERNAL MORTALITY—1957-1969

Avoidable deaths



cian or nurse midwife. In this state, patients such as these are still being delivered by virtually untrained midwives in totally inadequate home surroundings.

NURSE MIDWIVES

The training of nurse midwives at The University of Mississippi Medical Center has increased the availability of health manpower in the state and should help to further decrease maternal mortality. In one largely rural Mississippi county, the community physicians in collaboration with the local health department are utilizing certified nurse midwives and health aides to provide comprehensive maternal and infant care. In addition to intensive home visiting, prenatal patient education and nutrition supplementation, this health care team also provides in-hospital delivery of the uncomplicated obstetrical patients by nurse midwives working under physician supervision. The abnormal and high-risk obstetrical patients are delivered by the physicians. Within one year, the previously excessive maternal and infant mortality in that county has been decreased to a level which is near the national average. It is hoped that similar programs can soon be started in other areas.

The interest and information produced as a result of the committee's first 13 years of study are, I believe, sufficient to indicate the necessity of continuing this investigation. In the future, it may also be appropriate for the committee to consider other techniques of furthering good obstetric practice based on information obtained from their studies.

SUMMARY

1. A summary is presented of data obtained by the Committee on Maternal and Child Care in the first 13 years of their study of maternal

TABLE 6

MATERIAL DEATHS AND LIVE BIRTHS BY YEAR IN MISSISSIPPI (1957-1969)

Year	*Live Births*	*Maternal Deaths*
1957	60,712	75
1958	59,182	54
1959	60,562	58
1960	59,210	58
1961	59,523	48
1962	58,921	54
1963	57,361	41
1964	56,650	56
1965	51,171	41
1966	48,299	31
1967	46,594	27
1968	45,719	18
1969	—	14

deaths in Mississippi (from 1957 to 1969).

2. A gratifying decrease in the total number of maternal deaths is noted as well as a reduction in the proportion of direct obstetric deaths and avoidable deaths.

3. While there is a decrease in deaths from hemorrhage, the management of toxemia and infection and the provision of adequate antepartal care and delivery facilities are still pressing problems in Mississippi.

4. Education would be in order to get all maternal cases to present themselves for prenatal care in the first trimester and to insure delivery in a hospital.

5. Continuation of the committee's study would seem to be indicated, with hope of improvement in methods of collecting data, in expansion of techniques of spreading information about the findings and in enunciation of sound practices of obstetric care. ★★★

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In days of yore, a gallant and pure knight was very successful at dragon slaying. In fact, it was a poor week when he didn't knock off at least a couple. But the tide turned against him, because the Society for Prevention of Cruelty to Dragons began to pass resolutions condemning the practice. The knight went to the king to get off the hook.

"Your Majesty," he petitioned, "I have got to get out of this dragon killing business, and since I am a gallant and pure knight, will you please promote me to the diplomatic service?"

"I can make you an earl," said the king, "but since you'll have to face new hazards, I must give you a test. You'll have to drink a bottle of wine to show that you can hold your booze, pull the abscessed tooth of my pet tiger to show courage, and make love to a beautiful woman to show your *savoir faire.*"

At the appointed time, the knight appeared on a field where three tents had been set up. He went in the first, found a bottle of wine, and drank it. Being a pure knight, the alcohol got to him. He then went into the second tent from which growls and snarls issued.

Emerging from the tent with torn clothing and bloodied scratches, the knight called to the monarch in a tipsy voice: "All right, king, I drank the wine and took care of the tiger. Now where is that beautiful girl with the abscessed tooth?"



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ROBITUSSIN-DM®	●		●		●
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Radiologic Seminar CXIV: Unfused Odontoid

W. L. RONE, M.D.
Jackson, Mississippi

THIS 18-YEAR old male athlete was hospitalized following injuries received in an automobile accident on the day of admission. He was briefly unconscious following the accident. He had had two previous head and neck injuries in the three or four months prior, one being a motor vehicle accident and another a head injury playing football. He had complained of some chronic neck pain and stiffness for several years but had never sought medical attention for this.

X-rays of the cervical spine on this hospitalization show the odontoid process to be separated from the body of the axis. Cortical margin is clearly present on the inferior margin of the dens, the point of separation of the dens from the body of the axis is high, and the inferior margin of the dens is smooth. For these reasons this was considered an unfused odontoid and not a fracture.

In distinguishing an anomalous unfused odontoid epiphysis from a fracture, the presence of prevertebral soft tissue swelling can also help to suggest fracture. The history can be valuable in distinguishing fracture from lack of fusion. A patient with an unfused or anomolous odontoid may rarely have a history of repeated episodes of lightning paresthesia after mild trauma or episodes of quadriparesis which were so minor that the patient paid little attention to them.[1]

Since the patient had very little neck symptoms and no cord signs, it was then elected to do the flexion and extension laminographic views. (Those illustrated.) These show that the dens and the atlas move a considerable amount in relation to the axis. Ordinarily, flexion and extension views are no recommended if a fracture is suspected or if cord damage is suspected.[3] Because the patient was extremely active and had had previous head and neck injuries, it was elected to fuse the atlas to the axis.

During development, the ossification center of the body of the atlas separates from the rest of this vertebra and unites with the body of the axis to form the odontoid process. An epiphysis for the top of the odontoid appears between the third and sixth years and unites with the rest, usually before 12 years of age. As regards union of the odontoid process at its base, a faint cartilaginous line may persist until six or seven years of age. The usual disappearance of the synchondrosis between the dens and the body, and the base of the dens on each side to the neural arches, is between three and seven years.[2]

To determine the proper alignment of the atlas, a straight line drawn along the front of the odon-



Figure 1. Flexion. The odontoid lies in fairly normal alignment with the axis.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Hinds General Hospital, Jackson, Miss.



Figure 2. Neutral. Note that the odontoid in all positions lies somewhat more anterior than usual in relation to the tip of the clivus.



Figure 3. Extension. Note considerable posterior position of the odontoid and the anterior arch of the atlas in relation to the body of the axis.

toid process should meet the anterior margin of the foramen magnum. A line drawn along the inner margin of the posterior arch of the atlas will meet the posterior margin of the foramen magnum.[1] Failure of fusion of the odontoid process may be confused with a fracture line. A fracture usually occurs below the base of the odontoid, and its margins are frequently ragged. An ununited epiphyseal line usually has smooth margins and occurs at the base of the dens.[3] Dislocation of the odontoid may occur either with fracture or congenital failure of fusion and the dislocation may result in compression of the spinal cord. With the neck in flexion, the cord will usually be compressed between the upper margin of the posterior aspect of the second cervical vertebra and the posterior arch of the atlas. In this particular patient, the movement appears to be primarily posterior rather than anterior.

In either an unfused odontoid or fractured odontoid, the amount of dislocation or the relationship of the atlas, axis, and clivus may be influenced by the position which the patient is in when the x-rays are made. When the x-rays are taken with the patient prone and the neck extended, the alignment may appear normal, whereas, with the patient recumbent, frank dislocation may be shown. The prone position tends to reduce dislocations of atlas on axis. Dislocation of the atlas alone with an intact odontoid may occur due to relaxation or absence of the ligamentous attachments. This actually is the most dangerous dislocation of all, since the odontoid does not move, and the cord may be crushed between the odontoid and the posterior elements of the atlas.[1]

Other rare abnormalities of the odontoid include the hypoplastic ununited odontoid. In this there may be insufficient ligamentous attachments to control the motion of the odontoid in relation to the atlas. There may occur an ununited odontoid process with fusion of the odontoid to the clivus. Occasionally, an old unhealed childhood fracture at the base of the odontoid may be impossible to distinguish from the congenital lack of fusion.

Laminography is very important in the proper analysis of the problem of odontoid abnormalities with or without dislocation. ★★★

Hinds General Hospital (39204)

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The President Speaking

'Constructive Communication'

ARTHUR E. BROWN, M.D.
Columbus, Mississippi

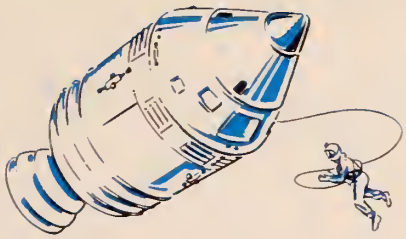
AT THE END of the 1970 Regular Session of the Legislature, the lack of communication between that body and your state association was at an all-time low. We were told that a positive approach was needed to heal the breach or damaging legislation would be the result.

Your Council on Legislation set out to reestablish our lines of communication and the results were extremely good. The weekly legislative newsletter (Blue Sheet) which is sent to each association member while the legislature is in session keeps us informed of the bills being considered. This information should be on your office desk on Fridays and the information given on proposed bills can then be discussed with your legislators when they are home on weekends. We were told in 1970 that they were not so interested in information given by our staff as they are in continued communication with their constituent physicians, so read your Blue Sheet and keep informed.

Another method of keeping communications open is by the monthly meeting of our Council on Legislation. Each month during the sessions your Council meets in the afternoon and then has a dinner meeting with the legislators who are on the House and Senate committees studying bills pertaining to health and medical measures. These meetings are well attended and seem to be mutually beneficial.

The third item to be mentioned in establishing communication is the Emergency Medical Care Unit. We are told that this is a service that the legislators feel is needed and that it is important. Volunteers are urged to send in their names and the dates that they are available. Representatives from 13 of the 18 component societies participated last year. Let's try to make it 100 per cent this year.

Legislative communication is most important but the key to it is an informed physician. We must commit ourselves or suffer the consequences. ★★★



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VOLUME XIII, NUMBER 2
FEBRUARY 1972

EDITORIALS

Abortion: Legal Morass of American Jurisprudence

I

ABORTION.

It's the one word in the English language which, upon mere mention, can call up the most penetrating and serious of scholarly debate, the liveliest and most heated of disagreement discourse, and the bitterest and most rancorous of toe-to-toe word slugging. In this complicated context, abortion has become a moral, theological, social, legal, and medical issue of massive proportion in the past decade.

The lawyers have wrestled with it through a morass of suits leaving the issue vague and clouded. Religious denominations long ago reached an impasse not likely to yield to ecumenical compromise. In social debate, abortion makes liberals from conservatives and reactionaries from liberals. Polarization has almost become petrification, for there is virtually no middle ground.

Resolution of the abortion debate—if it may rationally be termed resolution—must come in two principal areas: Legal and medical. The American Medical Association and most state medical associations have arrived at policy positions on abortion from a medical viewpoint during the past four years. AMA considers it a medical issue, permitting the procedure by a physician "for any reason that he determines is in the best medical interests of the patient," so long as it is not in violation of state laws. Federal medical facilities follow this policy scrupulously as illustrated by prevailing practices in military hospitals.

Most agree that truly decisive action can come only from the United States Supreme Court. But despite a stampede of appeals and enough legal meat to keep the justices chewing for a full term, the hope has been in vain.

II

The history of legal aspects of abortion is almost self-contradictory. Ancient civilizations practiced it. Hippocrates mentions it in the oath when he pledges not to give a woman an instrument to produce abortion. And until the 19th century, the annals of jurisprudence do not record a single instance of legal prohibition against abortion in any nation in the world.

The first law prescribing prohibitions against abortion was enacted in England in 1803, and the first such statute adopted in the United States was in the Illinois legislature in 1827. Ironically, the first state to proscribe therapeutic abortion altogether was New York in 1829.

By 1875, every state of the war-torn union had enacted abortion laws, usually with the consent of the medical profession. The goals and objectives of these laws now appear to have been more medical than they were legal, moral, or theological, because the concern of that day was not so much with abortion *per se* as with the consequences of abortion. This is clearly supported by a ruling of the New Jersey Supreme

Court in 1848 when it held that the state's anti-abortion law "was not to prevent the procuring of abortions so much as to guard the health and life of the mother against the consequences of such attempts."

The perspective of history teaches us that the law in 1848 was ahead of the science. Now it's the other way around.

III

In 1970, medicine and law were fascinated by the question raised in *U. S. v. Vuitch,* a case in the District of Columbia. Here, the federal district court had held the statute unconstitutional on the basis of being vague, and the U. S. Supreme Court had agreed to hear the appeal. Everything pointed toward a landmark decision which would clarify once and for all the complex legal questions on the issue. Because the D. C. statute closely resembled those of a host of states and because it was federal law, the decision of the nation's highest tribunal promised to be the legal answer. Regrettably, it was not.

When the Court heard the case, only seven justices were sitting. This was a clear signal to legal observers that no landmark decision was in the offing, and one was not. The Court upheld indictment of a physician who had performed the procedure in apparent violation of the D. C. statute and held that the portion of the law permitting therapeutic abortion "necessary for the preservation of the mother's life or health" was not unconstitutionally vague. Having thus skirted the constitutional issue, the Court did arrive at two lesser but useful findings:

—"Health" of the mother was held to include mental as well as physical health.

—The burden of proof in prosecution is upon the government to prove that an abortion was not performed to preserve the mother's life or health.

For reasons best understood in the sanctuary of the justices' chambers, the Supreme Court has avoided the constitutional issue of abortion. A number of cases within the past year show this:

—A layman was convicted under Iowa law of aiding and abetting an abortion. He appealed from a state court decision upholding the constitutionality of the act, but the Supreme Court dismissed the case, *State of Iowa v. Abodeely,* without opinion.

—In *Doe v. Randall,* the Supreme Court affirmed without opinion dismissal of a suit to declare the Minnesota Abortion Act unconstitutional and to enjoin prosecution of a physician for performing the procedure upon a woman exposed to rubella during pregnancy.

—The Court declined to review the constitutionality of the Texas statute in *Cooper v. State of Texas.*

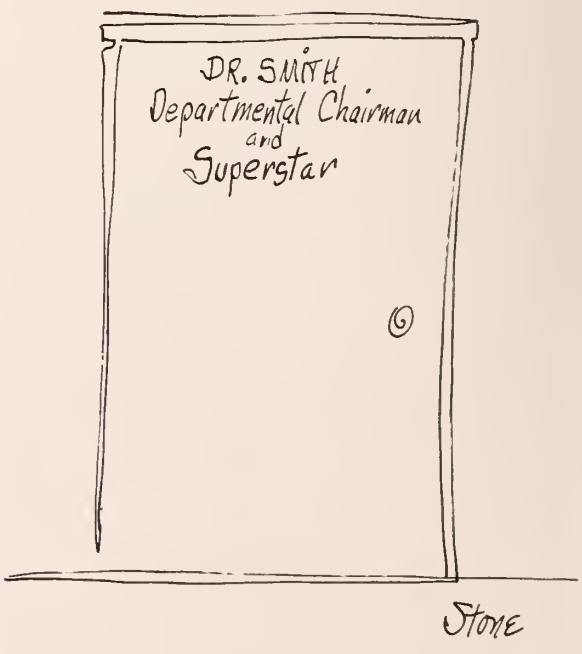
—In Wisconsin, a three-judge federal court held the state law unconstitutional but refused to restrain prosecution of a physician charged with its violation in *Babbitz v. McCann.* The Supreme Court dismissed the first appeal after which the three-judge federal court enjoined the state from prosecuting alleged violators of the act. On a second appeal, the Supreme Court vacated the lower court's judgment and remanded the case for reconsideration.

All of which is to document that nothing substantive has been decided in final case law about this explosive, varied, and frequently confused legal issue.

IV

With confirmation of Associate Justices Powell and Rehnquist, the Burger Court is at full strength, presumably ready and able to decide valid constitutional questions. There is no lack of them on abortion pending on appeal to the high tribunal at this moment, in fact, on the 1972 docket:

—Does the Georgia law unconstitutionally infringe upon the privilege of a physician to practice medicine or upon the right of a married



woman to decide whether to bear a child or not? *(Doe v. Bolton)*

—Is the Illinois act unconstitutionally vague? Does it violate a woman's right to privacy? Does Illinois have the right to legislate protection of an unborn child at all stages of gestation? *(Doe v. Scott)*

—Is the Louisiana provision for revocation of a physician's license if he performs an abortion other than to save the mother's life unconstitutionally vague? *(Rosen v. Louisiana State Board of Medical Examiners)*

—Did a federal court properly refuse to take jurisdiction of a suit challenging the constitutionality of the Missouri act? *(Rodgers v. Danforth)*

—Are North Carolina residency requirements for abortion constitutional? *(Corkey v. Edwards)*

—Did the federal trial court err in refusing to enjoin enforcement of the Texas law after declaring it unconstitutional? *(Roe v. Wade)*

So the most perplexing question of all is when a decision on this near-hopeless legal hodgepodge may be expected. Neither proponents nor opponents of antiabortion laws have anything to gain from a deepening of the quicksands of jurisprudence. Further enactments by state legislatures may only muddle the issue more, contributing to the confusion and uncertainty surrounding this critical question. However the issue may be decided, the United States Supreme Court must act.—R.B.K.



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The Laws Are Passed at Home

The 1972 Legislature has a sea of new faces. A third of the House of Representatives and a half of the Senate are newcomers to this important branch of state government. If tradition holds, at least three out of every 20 bills introduced will have health and medical connotations.

All of this points up the importance of physician-to-legislator communications, according to the association's Council on Legislation. Representatives and Senators value the views of hometown physicians. More than that, they need medical opinions in the critical business of saying what goes into the statute books and what does not.

The council and association's executive staff can work around the clock to seek enactment of good health laws and to try to defeat bad proposals, and often, they do. But laws are not passed at Jackson; that's only where the vote is taken. Laws are passed back home where constituents make their views known to the solons. Physicians have a valid interest in seeking out members of the Legislature each weekend and discussing pending issues with them.

The *Mississippi Medical Legislative Report,* much better known as the "Blue Sheet," arrives by first class mail by Friday morning each week. The quickly-read, lean-meat medium is designed to brief the busy physician on health and medical issues before the Legislature. It is a handy pocket reference of what's happened when and to whom. But unless it is read and used, then it amounts to little more than a lot of hard work, diligent research, and expenditure of funds for nothing.

A successful legislative program begins and ends in Hometown, Mississippi, not on Capitol Hill at Jackson. Whatever a physician's views are on pending issues before the 1972 Regular Session, he or she has a duty and professional interest in making certain that they are communicated to the Representative and Senator.—R.B.K.

A New, Private Look for CHAMPUS

What American medicine sought in 1956 is about to be realized in 1972. If the administration carries out its announced intentions, the Civilian Health and Medical Program of the Uniformed Services, CHAMPUS to us, will be just that—all private care.

Assistant Secretary of Defense Richard S. Wilbur, the respected California internist named to his high post last July by President Nixon, has ordered the five armed services to reduce the number of military physicians to 10,000 from the present 14,600, a reduction of 40 per cent. Moreover, he says to get this done by the end of 1972, at the latest.

Secretary Wilbur says that the 10,000 military medical officers ought to work hours comparable to the 56 hours per week average of private physicians, and he offers incentives in promotion and pay for realization of this objective.

Under the program, military medical facilities will gradually be closed to dependents of those on active duty and the retired, so care will be provided under what the Secretary describes as "a greatly expanded CHAMPUS program." Where CHAMPUS now pays 75 and 80 per cent of charges for outpatient care, the new and larger program will pay 90 and 95 per cent of charges, if the administration is successful in the Congress.

When proposals for the program were first introduced in 1955, there was no guarantee of medical services for dependents of those on active duty or for the retired. Care was rendered at military medical facilities on an as-available basis. Generally, care was unavailable. The AMA and most state medical associations, including the Mississippi State Medical Association, took this position:

"Whether medical care is to be guaranteed to dependents of active duty military personnel or the retired is a matter for the Congress to decide. If, however, a decision is made by the Congress to furnish this care, then it should be furnished by private physicians in private medical facilities (as opposed to public facilities) under a system of fees usually charged."

The enactment became law June 7, 1956, and the Department of Defense has commendably carried out the letter and spirit of it by developing what is without question the best medical care financing mechanism for purchase of privately provided services. We may now look forward to consummation of medicine's original goal, as well as a return to the private medical community of 4,600 physicians in the current year, boosting those in practice by 2 per cent.

As Fiscal Administrator of the CHAMPUS program in Mississippi for more than 15 years, the state medical association is already at work beefing up its capabilities to meet this new and exciting challenge, making this privately oriented program even more effective.—R.B.K.

No-fault Coverage Offers Promise

Have you purchased any automobile insurance lately? If so, the chances are that the price was just short of disabling, reflecting the unhealthy state of affairs in auto accident litigation, the injury and death toll on the highways, and the high costs of auto repairs. But more than anything else, the unconscionable costs in judgments where, it is worthy of note, the plaintiff's attorney gets a third to a half of the payout.

A majority of Americans are disgusted with the state of affairs in the auto insurance field, including physicians who wait months or years for payment for professional services rendered to ac-



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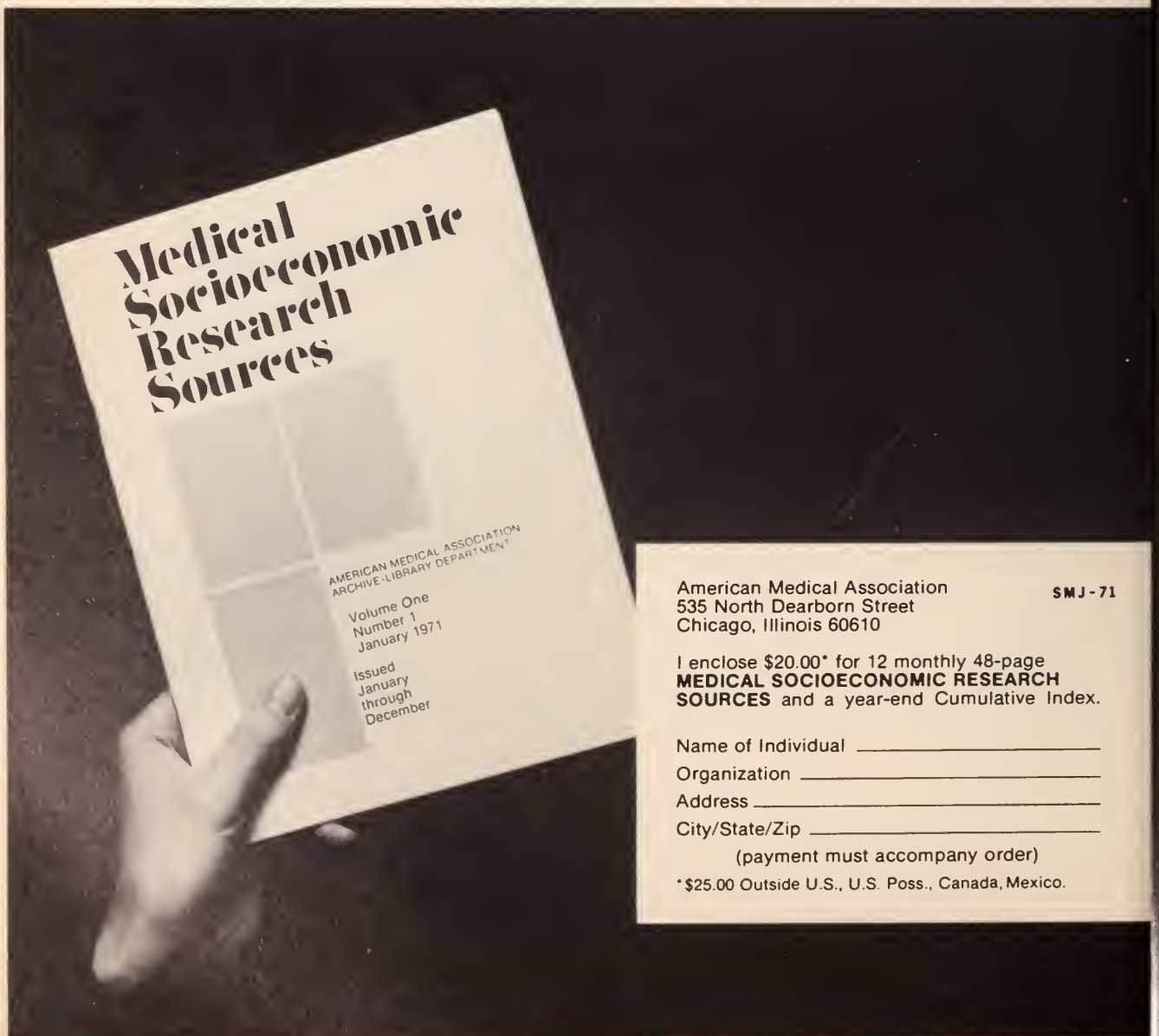
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cident victims and who are not infrequently tied up in court as medical witnesses during lengthy litigation. The industry is sick of this state of affairs, too, and is doing something about it.

Six states, Arkansas, Louisiana, Massachusetts, New York, Tennessee, and Texas, were recently surveyed by the National Federation of Independent Business on "no-fault" auto insurance. Of these, Massachusetts has laws providing for such coverage. A whopping 88 per cent of the businessmen surveyed endorsed the new form of auto coverage. It appears to benefit everybody except plaintiff's attorneys.

No-fault insurance works, generally speaking, in this way: Each motorist purchases his own coverage which pays him for medical expenses in event of auto accident, auto repairs or replacement, and loss of income from auto accident injury. In a majority of mishaps, no court action is ever necessary to determine who is at fault where the guilty is ordered to pay the bills. The one limitation to the coverage usually found is the necessity of going into court to determine blame for permanent crippling, loss of life, and certain other major losses. But the vast majority of court actions growing out of auto mishaps can and are avoided under the no-fault concept.

With the attorney's contingent fee system, hardly less than a third of all sums paid out in satisfaction of suits over auto accidents goes into some lawyer's pocket. Thus, a question is raised as to whether present coverage insures the motorist or the attorney. No-fault, also heavily favored in the insurance community, answers this pretty conclusively.

In Massachusetts, the bills are promptly paid for medical care, auto repairs, and most property claims arising out of an automobile accident. Yet, coverage in that commonwealth costs substantially less than it does in Mississippi where payment is made under liability policies only after legal determination of who did what. Isn't it about time we looked into something which may offer us more for less money?—R.B.K.

Assault on Antisubstitution

The assault on antisubstitution drug laws has come to the South, and Alabama is the battleground. Historically, the chief proponent of antisubstitution law repeal is the American Pharmaceutical Association, while the staunchest defenders of the principle are the American Medical Association and the National Pharmaceutical Council, the latter being a consortium of ethical drug manufacturers who subscribe to the views of the private physician.

In Alabama, the state pharmaceutical association has circulated "consent forms" to the physicians of at least one county which, if signed by the practitioner, would amount to surrendering his prerogative of choosing a specific drug for his patient. The pharmacist would be authorized to make a substitution without consultation with the prescribing physician in most instances. The Medical Association of the State of Alabama vigorously opposes the move.

The AMA is on record as stating that "repeal of the antisubstitution laws would remove the control the physician now has over the drug product to be dispensed, a disservice to both the physician and the patient. The physician would no longer know for certain that a patient was getting the benefit of the exact regimen of therapy he had ordered, and the patient might find himself in a considerable state of confusion that would shake his confidence in the pharmacist as well as in his physician.

"Merely dispensing a different tablet size than the one a patient is familiar with often is enough to convince him that a different medicine has been substituted. What then if a patient is told that a medication dispensed by one pharmacist is the same drug that he received from another pharmacist, despite the fact that it is different in size and color or that one may be a capsule whereas the other was a tablet?"

APhA arguments for repeal of antisubstitution laws are mostly economic and hardly disadvantageous to the pharmacist. APhA says that where substitution is allowed, a pharmacist is not forced to maintain a large inventory. This overlooks, AMA points out, the readily available wholesale sources serving pharmacists.

APhA also contends that the pharmacist can best determine therapeutic equivalency or superiority among different brands of drugs when the manufacturers themselves and the FDA have failed to do so. View that one with wonder, retorts AMA, because even the most skilled and talented pharmacist must work in an informational vacuum when filling a physician's prescription: He hasn't seen the patient nor does he know what the physician's plan of treatment is in toto.

Antisubstitution laws are for the protection of the patient, the ethical pharmacist, and the physician. These laws are, in effect, a reassertion of the physician's responsibility for the diagnosis and treatment of his patient. They help restrain the unprincipled pharmacist—however infrequently

he may be encountered—and the drug counterfeiter.

The Mississippi State Medical Association has long supported the prerogative of the physician to prescribe the drug of choice by brand or generic designation in the care of his patient. Let us hope for a summary and decisive end to the anti-substitution repeal effort as we wish much success to the Alabama association in its worthy endeavor.—R.B.K.

DEATHS

KAZAR, JAY JUSTIN, Tchula. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1924; interned John Gaston Hospital, Memphis, Tenn., one year; died Dec. 13, 1971, age 79.

DAVIS, SHED HILL, Calhoun City. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1927; interned Baptist Hospital, Memphis, Tenn., one year; died Dec. 31, 1971, age 69.

POSTGRADUATE CALENDAR

Feb. 16, 1972

RENAL SEMINAR: PRACTICAL OUTPATIENT NEPHROLOGY AND UROLOGY
University Medical Center, Jackson
Feb. 16, 1972, beginning at 8:30 a.m.
Sponsored by the Mississippi Kidney Foundation and The University of Mississippi School of Medicine, Departments of Medicine, Surgery, and Pediatrics

Participants:
John D. Bower, M.D., associate professor of medicine, The University of Mississippi School of Medicine, and director, artificial kidney unit, University Medical Center
Karl W. Hatten, M.D., clinical instructor in medicine, The University of Mississippi School of Medicine
James W. Headstream, M.D., clinical professor of urology, The University of Arkansas, and consultant, Veterans Administration Hospital, Little Rock, Arkansas
Ben B. Johnson, M.D., associate professor of medicine, and chief, renal disease, The University of Mississippi School of Medicine
Herbert G. Langford, M.D., professor of medicine, The University of Mississippi School of Medicine
J. M. Montalvo, M.D., associate professor of pediatrics, The University of Mississippi School of Medicine
August R. Remmers, Jr., M.D., professor of medicine, and co-director, division of nephrology, The University of Texas Medical Branch. Galveston, Texas
W. Lamar Weems, M.D., associate professor of surgery, and chief, division of urology, The University of Mississippi School of Medicine

Wednesday Morning

COMMON PROBLEMS IN THE MALE CHILD
Dr. Headstream
DIAGNOSIS AND TREATMENT OF KIDNEY DISEASE IN CHILDREN
Dr. Montalvo
ARTIFICIAL KIDNEY: THE FAMILY PHYSICIAN'S ROLE IN HOME AND TRAILER DIALYSIS
Dr. Bower
PROTEINURIA, EVALUATION AND MANAGEMENT
Dr. Johnson
DIURETICS, USES AND ABUSES
Dr. Remmers

Wednesday Afternoon

THE HYPERTENSIVE RENAL OUTPATIENT
Panel Discussion
COMMON UROLOGIC OFFICE PROBLEMS
Dr. Headstream
THE APPROACH TO THE PATIENT WITH URINARY TRACT INFECTION
Dr. Remmers
SURGICAL ASPECTS OF URINARY TRACT INFECTION
Dr. Weems

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Feb. 7-11, 1972

GASTROENTEROLOGY INTENSIVE COURSE
University Medical Center, Jackson
Feb. 7-11, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Lidio O. Mora, M.D., associate professor of medicine, The University of Mississippi School

of Medicine, and chief, division of gastroenterology, The University of Mississippi Medical Center and the Jackson Veterans Administration Center

This one-week intensive course will feature management of conditions most commonly seen in office practice. Registrants will review endoscopy of all kinds, including rectal sigmoidoscopy, and attend lectures and ward rounds at both the Medical Center and the VA.

Mar. 13-17, 1972

OBSTETRICS INTENSIVE COURSE

University Medical Center, Jackson
Mar. 13-17, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Donald M. Sherline, M.D., associate professor of obstetrics and gynecology, and instructor in anesthesiology, The University of Mississippi School of Medicine

For the second time this year, this one-week intensive course will present current concepts of obstetrical practice, including fetal medicine, prenatal and intrapartum medical complications of pregnancy, and obstetrical anesthesia and analgesia. Participants will round, take part in medical complications clinic and attend seminars and lectures.

Mar. 13-17, 1972

STROKE AND NEUROLOGICAL DISEASE INTENSIVE COURSE

University Medical Center, Jackson
Mar. 13-17, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinators:
Robert D. Currier, M.D., professor of medicine (neurology), The University of Mississippi School of Medicine, and co-director, demonstration stroke unit, Mississippi Regional Medical Program
Armin Haerer, M.D., associate professor of medicine (neurology), The University of Mississippi School of Medicine

Participants will study in depth management of acute stroke patients, seizure problems, and other neurological and neurosurgical disorders. The course will also emphasize day-to-day care of patients in the Mississippi Regional Medical Program demonstration stroke unit.

The eight one-week intensive courses for family physicians are offered through the Mississippi Regional Medical Program-funded Mississippi Postgraduate Institute in the Medical Sciences. Registration for each class is limited to physicians who are enrolled in the Institute.

CIRCUIT COURSES

SOUTHERN CIRCUIT

Gulfport—Feb. 2—Session 2; Gulfport Memorial Hospital, 6:30 p.m.
Bay St. Louis—Mar. 1—Session 3 (site to be announced); 6:30 p.m.
Hattiesburg—Mar. 2—Session 1; Forrest General Hospital, 6:30 p.m.
Laurel—Mar. 9—Session 2 (please note change from Hattiesburg site); Laurel Country Club, 6:30 p.m.
Hattiesburg—Mar. 16—Session 3; Forrest General Hospital, 6:30 p.m.
Session 1—Current Trends in the Treatment of Carcinoma of the Colon, Dr. S. R. Evans
Newer Techniques in the Diagnosis of Chest Disease, Dr. G. Boyd Shaw
Session 2—Emergency Room Diagnosis and Treatment of Drug Abuse, Dr. Gene G. Abel
Avoiding Patient Drug Abuse: What the M.D. Can Do, Dr. B. Steve Smith
Young People and Drugs, Tom Brewer, Martin Pinkston
Session 3—Presentation and Diagnosis of Hypothyroidism and Hypoparathyroidism, Dr. Herbert Langford
Carcinoma of the Thyroid, Dr. W. Coupery Shands

NORTHERN CIRCUIT

Columbus—Feb. 22—Session 2; Ramada Inn, 6:30 p.m.
Session 2—Bacterial Susceptibility to the Newer Antibiotics, Dr. William R. Lockwood
Current Trends in the Management of Septic Shock, Dr. William A. Neely

FUTURE CALENDAR

February 2, 1972
CIRCUIT COURSE, GULFPORT

February 7-11
GASTROENTEROLOGY INTENSIVE COURSE

February 14-16
CARE OF ACUTE CARDIAC PATIENTS, MISSISSIPPI HEART ASSOCIATION, BILOXI

POSTGRADUATE / Continued

February 16
RENAL SEMINAR

February 22
CIRCUIT COURSE, COLUMBUS

March 1
CIRCUIT COURSE, BAY ST. LOUIS

March 2
CIRCUIT COURSE, HATTIESBURG

March 9
CIRCUIT COURSE, LAUREL (please note change)

March 13-17
OBSTETRICS INTENSIVE COURSE
STROKE AND NEUROLOGICAL DISEASE INTENSIVE COURSE

March 16
CIRCUIT COURSE, HATTIESBURG

March 20-24
CARDIOLOGY INTENSIVE COURSE

April 10-14
PEDIATRICS INTENSIVE COURSE

April 11
CIRCUIT COURSE, MCCOMB

April 17-21
CARDIOLOGY INTENSIVE COURSE

April 24-28
RADIOLOGY INTENSIVE COURSE

April 25
CIRCUIT COURSE, COLUMBUS

May 1-5
NEPHROLOGY INTENSIVE COURSE

May 8-11
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

NEW MEMBERS

MARTIN, BENJAMIN FRANKLIN, III, Columbus. Born Memphis, Tenn. Mar. 25, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1966; interned Methodist Hospital, Memphis, Tenn., one year; pathology residency, same, July 1, 1967-June 30, 1970; elected Dec. 1971 by Prairie Medical Society.

PRYOR, JOSEPH A., Tupelo. Born Chattanooga, Tenn., Sep. 16, 1936; M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1962; interned St. Thomas Hospital, Nashville, Tenn., one year; ob-gyn residency Vanderbilt Hospital, Nashville, Tenn., July 1, 1964-June 30, 1967; elected Dec. 1971 by Northeast Mississippi Medical Society.

WILLIAMSON, STONEY, Hattiesburg. Born Tallulah, La., Aug. 22, 1937; M.D., Louisiana State University School of Medicine, New Orleans, La., 1964; interned Confederate Memorial Medical School, Shreveport, La., one year; ophthalmology residency, same, Aug. 18, 1967-Aug. 19, 1970; elected Dec. 1971 by South Mississippi Medical Society.

PERSONALS

MARIAN E. COCKRELL, formerly of Laurel, has joined ROBERT J. SCHMIDT of the Schmidt Medical Clinic in Biloxi for the practice of obstetrics and gynecology. Dr. Cockrell, a graduate of Tulane University, resides in Ocean Springs.

TOMMY M. DAVIS of Jackson has been sworn in as Coroner and Ranger in ceremonies at the Jackson Courthouse. Dr. Davis is the sole Republican elected to Hinds County office in the 1971 elections.

JERRY B. GULLEDGE of Crystal Springs has been elected president of Rolling Hills Country Club. Other physician directors include THOMAS F. MCDONNELL and W. MONCURE DABNEY.

S. S. KETY of Picayune was honored by the Hancock and Pearl River Counties Voiture No. 432 of the Society of 40 & 8 with "Dr. S. S. Kety Night." The American Legion organization honored Dr. Kety for his 25 years of service and presented him with a gold life membership card.

JOSEPH KULJIS of Biloxi was honored with a testimonial dinner by fellow members of the Slavonian Benevolent Association for his contributions to the lodge and his community.

DEWEY LANE of Pascagoula as chairman of the Mississippi Economic Council Special Committee on Public Education was guest speaker on education at the statewide MEC meetings in Hattiesburg and Jackson for new and returning legislators.

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Warning: Although generally safer than the amphetamines use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potent al risks

Adverse Reactions: Rarely severe enough to require discontinuation of therapy. Unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and restlessness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.). TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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- Prevents painful night leg cramps
- Permits restful sleep
- Provides simple convenient dosage— usually just one tablet at bedtime

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Specific therapy for night leg cramps.

The Laurel Medical and Surgical Clinic staff announces the removal of their offices from the Medical Arts Building to 103 South 12th Avenue. The clinic physicians are W. B. WHITE, T. R. HOWELL, and C. A. HOLLINGSHEAD.

BOB G. THOMPSON, formerly of Trenton, Tenn., has joined the Cosby Clinic in Iuka for the practice of general medicine.

DAVID G. VANLANDINGHAM and W. ROBERT HUDGINS of Jackson were speakers at the Baptist Orientation and Fellowship meeting and World Missions seminars held at Camp Garaywa near Clinton.

WALTER DEAN VICK of Grenada has been certified as a Diplomate of the American Board of Obstetrics and Gynecology.

Sheen Award Deadline Announced

The Guarantee Bank and Trust Company of Atlantic City in cooperation with the American Medical Association announces the opening of nominations for the 1972 Dr. Rodman E. Sheen and Thomas G. Sheen Award.

Consisting of a $10,000 cash prize and a commemorative plaque, the Sheen Award is presented annually to an American physician or physicians in recognition of outstanding contributions to medicine. It is made possible by a bequest in the will of the late Thomas G. Sheen, a businessman in Atlantic City, N. J.

The Sheen Award was first bestowed in 1968. Previous recipients were Drs. Irvine H. Page, Cleveland; Robert E. Gross, Boston; Charles B. Huggins, Chicago; and Maxwell Finland, Boston.

Nominations for the award will be accepted from state and local medical societies, medical specialty societies, medical research organizations, medical schools, hospital medical staffs, and public health agencies at all levels of government.

Written nominations are being accepted through Mar. 15, and should be sent to: The Sheen Award Committee, American Medical Association, 535 North Dearborn St., Chicago, Ill. 60610.

Candidates for the award will be evaluated by the Committee and recommendations will be made to the Board of Trustees of the American Medical Association. Final selection of the 1972 recipient or recipients will be made by the Trust Officers of the Guarantee Bank and Trust Company of Atlantic City, trustee of the estate of Thomas G. Sheen.

The award will be presented June 18, 1972, during the Annual Convention of the American Medical Association in San Francisco.

SBH Reports Increased Red Measles Incidence

Pockets of susceptibility to red measles are being found in Mississippi and a number of counties are experiencing sporadic outbreaks, the State Board of Health has reported.

"Even though Mississippi's immunization level against red measles is one of the ten highest in the United States, we've had a dramatic increase in the number of cases of measles reported in 1971," said Paul M. Turner, Jr., supervisor of the Immunization Program. "The increase over 1970 has been ten-fold."

Since September, according to Turner, measles outbreaks have occurred in Lee, Oktibbeha, Union and Clay counties. He said the State Board of Health brought each of these outbreaks under control quickly by using a mobile field force procedure.

"Teams of investigators from the Immunization Program were sent into the counties at the first sign of measles occurrence, surveyed the counties to see the extent of the problem and instituted control measures before the local situations developed into full-blown epidemics," Turner said.

Now, with the upsurge of red measles throughout the nation, Turner said it is most important for parents to see that their unimmunized preschool children get protection from this disease by immunization from either private physician or local health departments.

"A combination measles vaccine—against both red measles and rubella—is now being given by the State Board of Health and the county health departments," Turner stated.

"By receiving this combination vaccine, a child is not only getting protection against a disease that annually causes severe complications such as deafness, blindness and mental retardation," said Turner, "but he is also getting protection against rubella, which when contracted by expectant mothers may cause birth defects in their unborn children."

Measles—both red measles and rubella—is a problem in the preschool age group, said Turner. "Any complication these diseases may bring to a child is a heavy toll to pay for failure to immunize," he pointed out.

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UMC Gets Aneurysm Study Grant

A team of University of Mississippi Medical Center researchers has received a three-year $74,873 Public Health Service grant to find the most effective way to prevent recurrent bleeding from ruptured intracranial aneurysms during the acute phase.

Twenty-five to 30 patients will be accepted for the study.

"Subarachnoid hemorrhage is thought to account for at least 10 per cent of deaths from cerebrovascular disease," said Dr. Robert R. Smith, associate professor of neurosurgery and head of the UMC investigating team, "and the majority of these are caused by aneurysms on the circle of Willis."

Dr. Smith said the UMC team will investigate three treatment methods used in preventing recurrent bleeding: drug-induced hypotension, antifibrinolytic therapy and a combination of the two.

"Each seems superior to older methods," he said. "The question now is which is most effective."

Patients eligible are those referred to the University within a week of their last bleed. Grant funds, Dr. Smith said, will pay for special monitoring equipment, drugs and intensive nursing care in the UMC stroke unit or intensive care unit, but will not cover hospitalization.

Physicians may obtain further information on the study by calling Dr. Smith at extension 2405 at the Medical Center.

Internists Set 1972 International Congress

The XII International Congress of Internal Medicine, a biennial event sponsored by the International Society of Internal Medicine, will be held Sept. 5-9, 1972, at the Sheraton Boston Hotel, Boston, Mass.

The scientific program, focusing on man's relationship to specific factors affecting his health, is expected to attract more than 2,500 specialists in internal medicine and related fields from 47 countries. Major sections will be on Man and His Genetic Environment, Man and Infectious Agents, Man and Diseases of Modern Society and Advances in Internal Medicine. The Congress will also have scientific and technical exhibits.

According to Dr. Richard A. Kern, Philadelphia, Pa., president of the International Society of Internal Medicine, a major emphasis will be on new knowledge about cancer. "One-fifth of the section on Man and Infectious Agents will be on viruses and cancer and the section on Man and His Environment will include the unusual occurrence of cancers of the stomach, colon, lung and genitourinary tract," Dr. Kern said. "Finally, the section on cancer diagnosis and treatment will be part of the Advances in Internal Medicine program."

Dr. Thomas A. Warthin, West Roxbury, Mass., general chairman of the Congress, has issued a call for scientific program abstracts. These should be sent to Dr. John B. Stanbury, Massachusetts Institute of Technology, Cambridge, Mass. Deadline is April 1, 1972.

Book Reviews

The Care of the Geriatric Patient. Edited by E. V. Cowdry, Ph.D., and Franz U. Steinberg, M.D. Ed. 4. 441 pages with 52 illustrations. St. Louis: The C. V. Mosby Company, 1971. $21.00.

It is not difficult to obtain information from any general textbook of medicine which may be used in patient care; this book is no exception. The major virtue of this text is the informal manner in which it is presented. Most of the information could be found in any good textbook of medicine, but this does not detract from its usefulness.

Dr. Cowdry's remarks in the opening section, while trying to be both informative and inspiring, somehow miss the mark. I agree with him that it should have been written by an internist experienced in care for geriatric patients.

The section on endocrine problems should stimulate one to look for the elderly patient who presents with senile degenerative which may respond to pharmacological treatment.

There are sections on medical care, surgical care, nervous treatment care, and delivery of care. This book should be helpful in caring for the geriatric patient.

A. Robert Dill, M.D.

Preventive Medicine in World War II, Volume IX, Special Fields. Editor: Ebbe Curtis Hoff, Ph.D., M.D. Washington, D.C.: Office of the Surgeon General, 1969. $8.00.

The delivery of health care to the peoples of the United States now occupies "Center Stage." The shortage of health manpower has led to the recent passage of comprehensive health manpower legislation. The training and utilization of allied health personnel as a means of extending the physicians' ability to deliver health care to the people is finally receiving badly needed emphasis and support. The seriousness of the current health care crisis in Mississippi and in the nation enhances the timeliness and the usefulness of this remarkable volume.

Pearl Harbor suddenly added new vast theaters of war that included areas where insect borne diseases such as malaria, scrub typhus, as well as dysenteries, dermatologic disorders and the effects of an intolerably hot climate, contrasted with the European theater where cold injury (trench foot, frost bite, immersion foot, etc.) was added to the many other hazards faced by troops. The loss of manpower from disease threatened the success of military operations.

The most massive medical manpower training effort in history was carried out by the American Armed Forces in World War II with significant success. Health education of not only the troops but for the line officers was highly effective.

Most of the lessons learned during World War II not only regarding the training of medical manpower, but in providing health education for the troops are as applicable today as they were then. This holds for the threat of venereal disease, as well as for insect borne and almost all the infectious diseases.

Additional fascinating chapters on, a) the health problems of enemy prisoners of war, b) medical intelligence, and c) medical laboratories are included.

This is an invaluable volume for all physicians and medical educators, especially those who are preventive medicine minded.

Robert E. Blount, M.D.

CHAMPUS Authorizes Plastic Surgery

Cosmetic and plastic surgery procedures that are intended to, or are incidental to other procedures that are intended to, improve abnormal bodily functions or relieve pain are authorized under CHAMPUS when performed by a qualified practitioner.

Officials of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) also note that cosmetic and plastic surgery procedures that are performed solely for the purpose of changing or improving the appearance or form of the individual will only be authorized when competent professional authority has determined that the accomplishment of the procedure is essential to the physical or mental health of the patient.

CHAMPUS officials have advised beneficiaries that these procedures must be approved in writing by the state fiscal administrator prior to their accomplishment.

Physicians Invited to Coaches Conference

Physicians interested in sports medicine will have the opportunity to learn from and mingle with several of the nation's leading authorities on sports-related injuries.

A medical panel will be one of the features of the American Football & Basketball Conference to be held at the University of Notre Dame, March 23-26, 1972.

Among the nationally known medical authorities addressing thousands of football and basketball coaches, athletic directors, trainers, and their associates expected to attend the "Coach-In" will be: Dr. James A. Nicholas, New York Jets Team Physician, who earlier this season operated on New York Jets quarterback Joe Namath; Dr. Leslie M. Bodnar, orthopedic consultant, Notre Dame University, and clinical associate professor of orthopedic surgery at Indiana University Medical College; Dr. Frank McCue, Team Physician, University of Virginia, and leading lecturer and authority on the treatment of athletic injuries.

Among the topics the physicians will discuss are "The Importance of Early Diagnosis and Treatment in Athletic Injuries" and "Orthopedic Conditions Involving the Developing Athlete."

The medical panel is but one of a multitude of events scheduled for the four day conference.

The conference, years in the planning, has been made possible by the cooperation of the Center for Continuing Education of the University of Notre Dame. Certificates will be presented to all registrants by the University of Notre Dame.

An Awards Committee including national figures like Howard Cosell of ABC-TV; Irv Kupcinet, TV host and *Chicago Sun-Times* Staff Member; and United States Senator Robert Taft, Jr.; entertainers Steve Allen and Jim Nabors will help in making special awards presentations.

Registration information on the conference can be obtained direct from Notre Dame's Center for Continuing Education, South Bend, Indiana, or by writing the event's public relations agency, Ball Associates, 845 N. Broad St., Philadelphia, Pa. 19123.

Pre-Sate® (chlorphentermine hydrochloride)

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Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

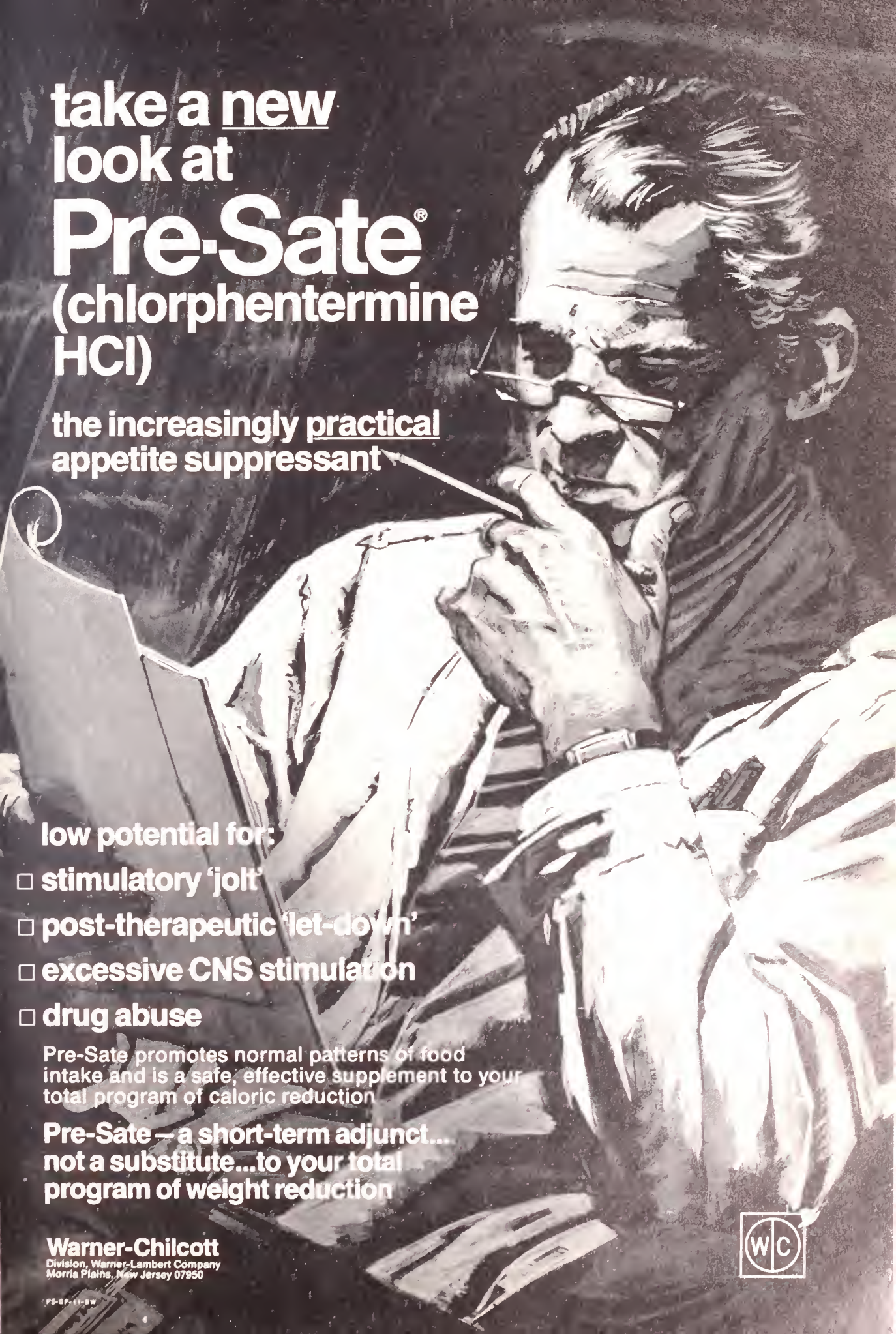
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.


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When you select this familiar antibiotic for IV infusion you have available a broad dosage rang that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyc hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in n less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

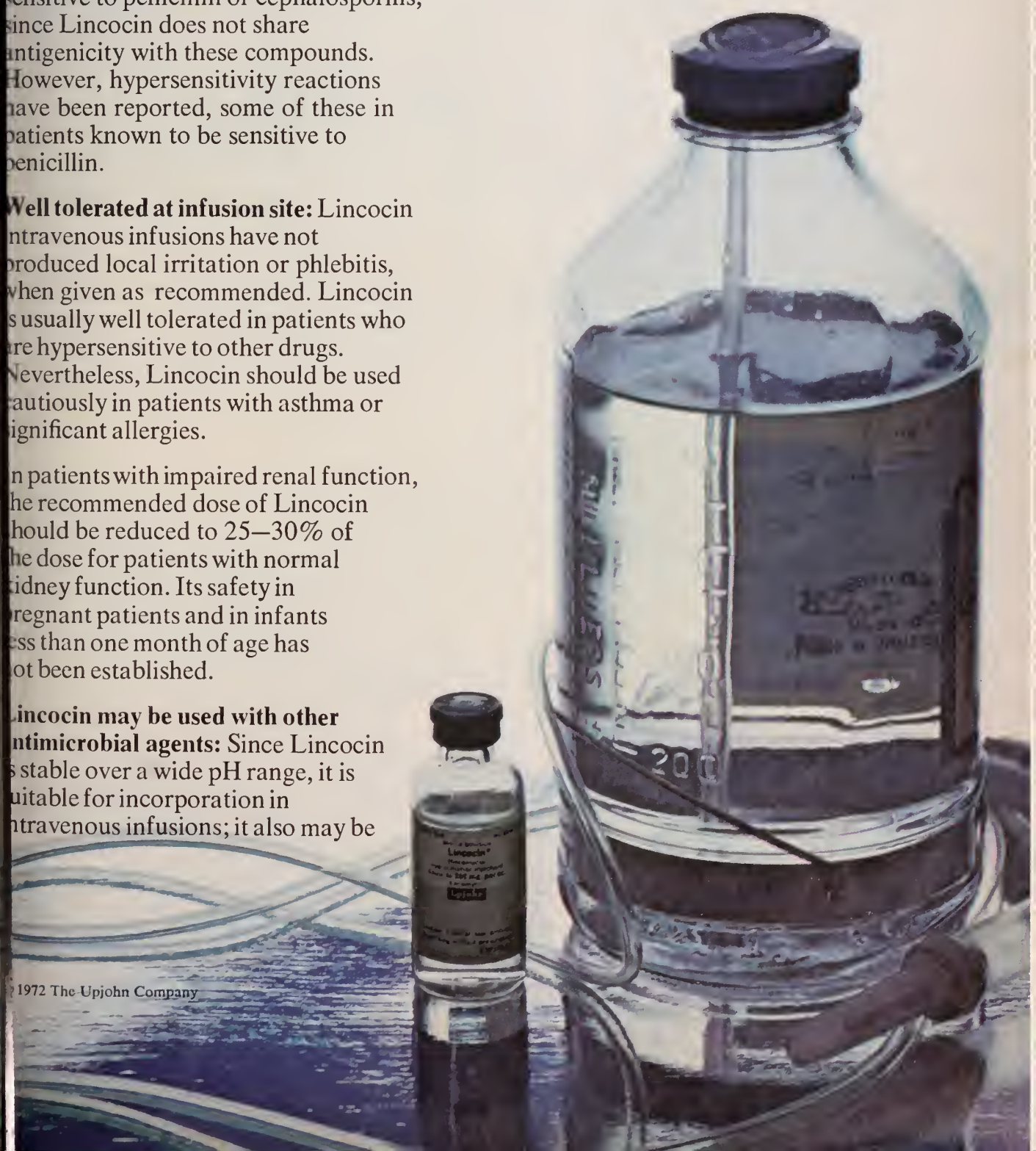
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatme
Skin and mucous membranes—Skin rash urticaria, vaginitis, and rare instances of foliative and vesiculobullous dermatitis h been reported. *Liver*—Although no direct lationship to liver dysfunction is establish jaundice and abnormal liver function t (particularly serum transaminase) have b observed in a few instances. *Cardiovascu* —Instances of hypotension following par teral administration have been report particularly after too rapid IV administ tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more adm istered IV, dilute in 500 ml of fluid administer no faster than 100 ml per ho *Special senses*—Tinnitus and vertigo h been reported occasionally. *Local reacti* —Excellent local tolerance demonstrated intramuscularly administered Lincoc (lincomycin hydrochloride). Reports of p following injection have been infreque Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distil water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500* Capsules—bottles of 24 and 100. *Ster Solution, 300 mg per ml*—2 and 10 ml vi and 2 ml syringe. *Syrup, 250 mg per 5* —60 ml and pint bottles.

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Sniffles, Aches, Heart Episodes Mark Entry of EMCU Into Eighth Year

The ills are mostly minor, sniffles and headaches and the like, but the Doctor of the Day at the association's Emergency Medical Care Unit in the Capitol building at Jackson may encounter a heart episode and worse.

For the eighth consecutive year, the Mississippi State Medical Association's public service project, the EMCU, went into operation before the first gavel sounded to convene the 1972 Regular Session on Jan. 4. And for the fourth year. Mavis Barlow, R.N., of Jackson is devoting her professional skills to the well-being of the Representatives and Senators.

The response by the membership to DOD assignment has been phenomenal, according to Dr. C. D. Taylor, Jr., of Pass Christian, chairman of the Council on Legislation.

"We had a DOD assigned for every legislative day in January," Dr. Taylor said, "and we had to decline almost as many applications as we accepted. February is filled, and we are processing requests for assignments in March."

Legislative leaders have praised the service which costs the state nothing. Physicians contribute their services, and association funds are used to defray direct expenses. The state furnishes the unit space, a telephone, utilities, and janitorial services.

Mrs. Barlow said that the unit's 1972 "practice" is brisk. "Almost every member arrived in Jackson with a cold on Jan. 4," she observed.

A typical day in the care unit produces a page with a staple in his finger, solons with half a dozen headaches and as many colds or mild URIs, two or three blood pressures to monitor—sometimes with a report to the member's hometown physician via WATS line, an ill visitor, mild trauma, and a localized infection.

More serious episodes include heart attacks (oxygen is maintained in the unit and on the floors of the House and Senate chambers), more severe trauma (a Senator got himself a seven-stitch gash in the head when he misjudged the door to a committee room), or a serious medical or surgical condition (more often than not requiring an ambulance to a Jackson hospital).



Veteran representative Kenneth Williams of Clarksdale, seated, shows new House member Charles Capps of Cleveland, left, the Emergency Medical Care Unit maintained in the Capitol building by the state medical association. At right is Dr. Faser Triplett of Jackson who is serving as Doctor of the Day and Mrs. Mavis Barlow, R.N., EMCU nurse.

On the it's-funny-now-but-not-then side, a Representative got a wasp sting during debate in a committee hearing; a Senator who refused to leave the floor had Mrs. Barlow's services during a hot Medicaid debate, soaking his infected hand in hot salts water; and in a previous year, the Governor himself delayed his State of the State address until he could come by the unit to take an antihistamine tablet for a persistent sniffle.

During the 1971 Regular Session, there were 576 visits in the care unit, 136 by Senators, 231

Representatives, 15 pages, 13 visitors to the Capitol, 175 by the staff of the Legislature, five newsmen, and then-Gov. John Bell Williams.

Doctors of the Day were present on all but six days in 1971 when Jackson physicians served on call. Mrs. Barlow paid particular tribute to Central Medical Society members for support of the program. DODs represented 13 of the 18 component medical societies of the association.

In 1971, the Legislature unanimously adopted H.R. 17, introduced by no less distinguished a sponsor than House Speaker John R. Junkin, expressing appreciation to the association for the EMCU service and for "advice and assistance to the Legislature."

ACP Takes Three State M.D.s

Three Mississippi physicians are among 242 physicians in the United States and Canada who have been admitted as members of the American College of Physicians.

The new initiates are Drs. Floyd L. Lummus and Antone W. Tannehill, Jr., of Tupelo and Charles A. Marascalco of Vicksburg.

The 56-year-old international medical specialty society dedicates itself to upgrading medical care, teaching and research through stringent standards of membership and programs of continuing education.

Dr. Hugh R. Butt, Rochester, Minn., president of the American College of Physicians and professor of medicine at the Mayo Graduate School of Medicine, said the new members have met the College's requirements by presenting evidence of their eligibility to take the national board of certification in internal medicine or a related specialty field. New members must also have graduated from a medical school at least six years prior to their application and have been a practitioner, teacher or researcher in internal medicine for at least two years. There also are two other major membership categories—Fellows and Masters.

The College today is one of the leading medical societies in the provision of continuing educational opportunities for its 18,500 members. A pre-world War II pioneer in postgraduate courses and other means for continuing education, the ACP in 1968 started periodic self-assessment examinations for which more than 27,000 subscriptions have been sent to physicians so they can privately judge their own degree of competence and direct their future postgraduate education.

MHA Plans Cardiac Seminar

The Mississippi Heart Association Coronary Care Committee will present a cardiovascular seminar on "Modern Management of the Acute Cardiac Patient" Feb. 14-16, 1972 at the Sheraton-Biloxi Motor Inn in Biloxi.

This course is open to physicians and head nurses in coronary care units. Registration fees are $100 for physician members of MHA, non-members $125, nurse MHA members $50, and nurse non-members $75. The three luncheons, banquet and cassette cartridge of the recorded seminar lectures are included.

Full attendance is approved for 12 hours of credit by the American Academy of Family Physicians.

Guest faculty include Drs. S. Gilbert Blount, Jr., professor of medicine at the University of Colorado; Daniel C. Connolly, associate professor of medicine at the Mayo Graduate School of Medicine; Anthony M. Damato, chief of the cardiovascular program of USPHS Staten Island, N. Y. hospital; Wayne E. Dear, cardiology and cardiac catheterization, Houston, Tex.; Grady L. Hallman, Jr., clinical associate professor of surgery at Baylor College of Medicine.

Also Drs. Thomas N. James, professor of medicine and pathology of the University of Alabama Medical Center; Henry J. L. Marriott, clinical professor of medicine at Emory University School of Medicine; and Demetrio Sodi-Pallares, National Institute of Cardiology, Mexico City.

Mississippi physicians who will take part are Drs. Thomas M. Blake, H. Davis Dear, James C. Hays, Patrick H. Lehan, Kenneth R. Bennett, and William H. Rosenblatt of Jackson, Wesley W. Lake of Gulfport, and Clifford Tillman of Natchez.

For further information, contact Mrs. Pat Roundtree, Program Director, Mississippi Heart Association, P.O. Box 16063, Jackson, Miss. 39206.

National Leaders Visit Association's EMCRO

Top representatives of the National Center for Health Services Research and Development conducted a site visit of the Mississippi Experimental Medical Care Review Organization at the state medical association headquarters building in Jackson, giving the peer review project high marks.

Dr. Paul J. Sanazaro of Rockville, Md., National Center director, headed the delegation. Other participants included Dr. James A. Roberts, project officer; Mrs. M. Moore, program development; Dr. James Z. Appel, Lancaster, Pa., and Dr. Maynard Shapiro, Chicago, consultants.

Representing the association were Dr. Millard S. Costilow of North Carrollton, chairman, Committee on Peer Review and chief investigator of the EMCRO project; Rowland B. Kennedy, Jackson, MSMA Executive Secretary and EMCRO project director; and Hilton C. Bowers, Jackson, director, Division of Medical Care Plans and EMCRO director.

The association received EMCRO grant funding for two years at $369,000 on June 30, 1971. Two state medical associations, Hawaii and Mississippi, received these major awards while lesser awards and feasibility study grants went to Georgia and Utah and two major county medical societies.

Under the grant, the association must bring the peer review mechanism into being as proposed in its protocol and publish the findings. The program is entirely that of the association and is now fully operational under the supervision of the Committee on Peer Review which reports directly to the Board of Trustees.

During the site visit, EMCRO leaders reported on the progress of peer review in Mississippi and the current status of the project, pointing out that eight state hospitals with 1,400 beds are now participating.

The National Center visitors examined the program and discussed review mechanisms, accessibility to care, actions of the state insurance department, participation by consultants, and continuing medical education.

Dr. Sanazaro was complimentary of the computer technology developed and suggested involving other health professionals in the program. The site visitors inquired about federal-state programs and urged cooperation with the Regional Medical Program and the state Division of Comprehensive Health Planning.

Mr. Kennedy reported on the progress of the Mississippi Foundation for Medical Care and said the Foundation is already undertaking negotiations with third parties.

Concluding the site visit, Dr. Sanazaro pointed out that the role of the National Center is to support and advise.

At the request of the visitors, plans are being made for a meeting of the seven organizations which also received EMCRO grants at Jackson on Feb. 21-22 to review the national program and visit the Mississippi project. The national leaders felt that the other grantees could benefit from the advanced technology being developed in Mississippi, said Dr. Costilow.



National Center staff visitors Dr. James A. Roberts, project officer, at left, and Mrs. M. Moore, program development, both of Rockville, Md., confer with EMCRO director Hilton C. Bowers of Jackson about ongoing projects and future plans of the Mississippi Experimental Medical Care Review Organization.



Dr. Millard S. Costilow, left, of North Carrollton, EMCRO Chief Investigator, explains how the Mississippi project works to Dr. James Z. Appel, of Lancaster, Pa., consultant and a past president of the AMA; Dr. Maynard Shapiro of Chicago, consultant and a past president of the American Academy of Family Physicians; and at right, Dr. Paul J. Sanazaro of Rockville, Md., National Center director.

ADA Sets Children's Dental Health Week

The American Dental Association will point out that "Happiness is a healthy mouth," during the 23rd annual observance of National Children's Dental Health Week, Feb. 6-12, 1972.

Dr. Carl A. Laughlin of Clarksburg, W. Va., ADA president, points out that: "The relationship of good dental health to good general health is highly important. For this reason, it is imperative to develop good oral hygiene habits in childhood, so that they carry over into adulthood."

Dr. Laughlin suggested that parents teach their children the basics of home oral hygiene, including brushing teeth after eating, using dental floss, cutting down on sweets, drinking fluoridated water to prevent decay, and having regular dental check-ups for the entire family.

He stressed that "every family that follows these important oral hygiene practices faithfully will have good dental health for a lifetime."

UMC Announces Faculty Changes

Recent faculty changes at the University of Mississippi School of Medicine included the appointments of three assistant professors and three instructors, plus two promotions to professor.

New assistant professors who joined the medical faculty were Dr. James Galyean, medicine, effective Jan. 1, 1972; Dr. Glenn Curtiss Warren, neurosurgery, effective May 1, 1972, and Dr. Beth Hoskins, pharmacology.

Dr. Galyean and Dr. Warren are native Mississippians who hold B.S. and M.D. degrees from the University of Mississippi. Dr. Galyean interned at the University of Washington at Seattle and Dr. Warren did his internship at Wilford Hall U. S. Air Force Medical Center in San Antonio, Texas. Both did residencies at the University Medical Center in Jackson. Dr. Galyean was also a resident at the San Francisco VA Hospital.

Dr. Hoskins, a Belhaven College graduate, earned the Ph.D. at the University of Mississippi Medical Center. Prior to her appointment, she was a postdoctoral fellow at the University of Florida College of Medicine.

Added in at the instructor level were Dr. Edward L. Gieger, radiology; Dr. Robert Gordon Pischel, Jr., obstetrics and gynecology (research); and Dr. Larry Welch, medicine (research).

Former associate professors Dr. Richard C. Boronow, obstetrics and gynecology, and Dr. Forrest Hutchison, preventive medicine, have both been promoted to professor.

Dr. Richard C. Miller, assistant professor of surgery, has been named associate professor.

Headache Research Foundation Established

A group of prominent physicians, members of the American Association for the Study of Headache, have established a not-for-profit lay organization, National Migraine Foundation, with a Grants and Research Committee to utilize gifts and donations in conducting research programs through university connected hospitals and "headache clinics."

The new Foundation will be headquartered at 307 North Michigan Avenue in Chicago.

Objectives of the Foundation, as outlined by Dr. Seymour Diamond of Chicago, president, are: "To investigate causes and present treatment of headaches, encourage the creation and support of headache treatment centers, and provide professional sources of information about headaches for physicians and the public."

According to Dr. Diamond, "Until recently medical research has been concentrated on the killing diseases such as strokes, heart disease and cancer. The problem of the headache, possibly the number one cause for loss of manpower to business and industry, has been neglected. In addition, Americans spend about $300 million each year on headache remedies, which generally give only temporary or little to no relief.

"In more than eight years devoted to research and treatment of headaches, I have discovered that the majority of sufferers of head pain can be helped once an accurate diagnosis is made."

Dr. Diamond concluded, "It is my contention that it is time we stopped treating the headache like the common cold, and put our efforts into treating it with the respect due the crippling disease it can be."

Dr. Bernard Baltes, also of Chicago, holds the office of secretary-treasurer.

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You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Call it what you will, it may be premalignant

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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nd Efudex® (fluorouracil) 5% cream can resolve it.

ll it actinic, solar or senile keratoses, ny regard it as "precancerous."[1,2]

ical fluorouracil, considered by some dermatologists to be a major ance in the treatment of multiple solar keratoses,[3,4] offers the physi- a relatively inexpensive alternative to cryosurgery, electrodesic- on and cold knife surgery. Of the topical fluorouracils available, only dex offers 2% and 5% solution and 5% cream formulations—formula- s that have proved effective in the treatment of these mutliple lesions.

ual duration of therapy, 2 to 4 weeks.

dies showed that with the 2% and 5% Efudex preparations, the usual tion of therapy was only 2 to 4 weeks.[5] Other studies with topical rouracil revealed that when concentrations of less than 2% were l, significant numbers of lesions recurred.[6]

eats the lesions you can't see, too.

merous lesions, not apparent prior to 2% and 5% Efudex therapy, nifested themselves by definite reactions, while intervening skin ained relatively unaffected.[5] The early eradication of these subclini- lesions (which may otherwise have undergone further progression) bably accounts for the reduced incidence of future solar keratoses in ents treated with topical fluorouracil—especially with 5% centrations.[6]

w to identify solar keratoses.

ically, the lesion—a flat or slightly elevated brown to red-brown ule—is dry, rough, adherent and sharply defined. Multiple lesions the rule.

edictable therapeutic response.

response to a typical course of Efudex therapy is usually racteristic and predictable. After 3 or 4 days of treatment, erythema ins to appear in the area of keratoses. This is followed by a moderate tense inflammatory response, scaling and occasionally moderate lerness or pain. The height of this response generally occurs two ks after the start of therapy and then begins to subside as treatment opped. Within two weeks of discontinuing medication, the mmation is usually gone. Lesions that do not respond should iopsied.

rences: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, e & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: atment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *maceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, . 3. Belisario, J. C.: *Cutis, 6*:293, 1970. 4. Sams, W. M.: *Arch. Derm., 97*:14, 1968. ta on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and , E.: *Cancer, 25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



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cream/solution

New Drug Packaging Announced

Some relief is on the way for soaring health care costs, according to Philips Roxane Laboratories, Inc., a Columbus, Ohio, drug firm which has reduced the cost of packaging its products and plans to pass the savings on to its customers.

The company announced at the American Society of Hospital Pharmacists Convention that it will be offering a line of 38 unit dose, oral liquid pharmaceutical products in aluminum containers supplied by Aluminum Company of America. These products—which include hard-to-hold drugs and such items as mineral oil and milk of magnesia—formerly were distributed in unit-portion glass vials.

The new Patient-Cup™ package, aimed at helping hospitals combat rising health care expenses, costs an average of 20 per cent less than the glass vial it replaces. This savings will be passed along to Philips Roxane customers in the form of comparable price reductions, effective immediately.



Alcoa aluminum cups will replace glass vials in Philips Roxane's line of 38 unit dose, oral liquid pharmaceutical products. The new package, aimed at helping hospitals combat rising health care expenses, costs an average of 20 per cent less than the glass container it replaces.

Philips Roxane president G. C. Wojta projected that, by 1975, more than 80 per cent of approximately one billion oral liquid doses of medicine taken by patients in the United States will be administered in unit dose containers. "If these unit containers are made from aluminum foil rather than glass, hospitals could realize an annual savings of about $20 million," he said.

Mr. Wojta pointed out that the unit dose package eliminates the time-consuming job of pouring individual doses from large, hard-to-hold bottles—a method still practiced by most hospitals. "This re-packaging step often causes spillage, contamination and inaccurate dosage," he said. "In some cases, tragic mistakes in types and dosages of medicines have been made."

The aluminum foil container is filled, labeled and sealed aseptically at Philips Roxane Laboratories. It is opened at bedside where the patient drinks a precisely measured dose from the aluminum cup.

Mr. Wojta listed these other advantages of the unit dose packaging system: eliminates need for souffle cups, dispensing bottles and medicine glasses; permits nurses to make better use of time; no need to tie up capital with large volume purchases; easy-to-handle, simple to open and easy to administer; permits more efficient use of storage space; packages refused by patient can be returned to hospital pharmacy for future use; and reduces overall operational expenses.

Each Alcoa aluminum container is hermetically sealed with a peel-away foil lid. Both lid and cup body feature proprietary coatings, which protect the package against chemically reactive (hard-to-hold) drug products.

The Patient-Cups are nested in molded styrene shelf trays. The lightweight trays are labeled for rapid identification and can be stacked conveniently to occupy minimum shelf space. Each tray comes with an insert containing product information and is protected by a shrink-wrapped transparent film.

While the trays accommodate both the 5-11.25 milliliter and 15-30 milliliter size cups, the overall tray size has been standardized for convenience of handling and inventory arrangement. A compact, corrugated shipper contains a total of 100 doses in 10 nesting trays.

Fertility Society Plans Meet

The American Fertility Society will hold its Fifth Postgraduate Course and 28th Annual Meeting Feb. 27-Mar. 1, 1972, at the Waldorf-Astoria Hotel in New York City.

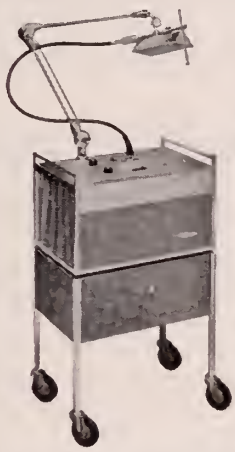
Papers will be given on such topics as ovarian function, the oviduct, hypothalamic-pituitary function, immunology, the male factor, population trends, fertility control, abortion and sterilization, and endoscopy.

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Index to Advertisers

American Medical Association 62B

Burroughs Wellcome and Company 12, 74A

Campbell Soup Company 50A

Geigy Pharmaceuticals 10A

Hill Crest Hospital 10

Kay Surgical, Inc. 19

Lederle Laboratories 42A, 42B, 42C, 42D

Eli Lilly and Company front cover, 18

Merrell-National Laboratories 66A, 66B

Miss. Medical Political Action Committee 19

New Orleans Graduate Medical Assembly 11

Wm. P. Poythress and Company 10D, 58A, 58B

A. H. Robins Company 54A, 54B, 55

Roche Laboratories second cover, 3, 6, 7, 10B, 10C, 74B, 75, fourth cover

J. B. Roerig and Company 8, 16, 17

Saint Jude Hospital 61

G. D. Searle Company 50B, 50C, 50D

Smith, Kline and French Laboratories 46A

Stuart Pharmaceuticals 46B

The Upjohn Company 14, 15, 70B, 70C, 70D

Wallace Pharmaceuticals 4

Warner-Chilcott Laboratories 70, 70A

Winthrop Laboratories 62A

Woodward Academy 68

Thomas Yates and Company third cover

IN CONCLUSION

Phase II controls are not all bad news for physicians who have established Keogh tax-deferred retirement programs, such as MSMA-Deposit Guaranty National Bank program. Phase II does not limit contributions physicians make to themselves, since these payments are considered profits, not professional income. Contributions for employees are limited to 5.5 per cent increase as part of salaries.

Super rats are growing in Norway and black species to an international menace, according to WHO. Immunity to Warfarin, widely employed rodenticide, has been found among Norway and blacks in U.S. and northern Europe. In Great Britain where problem is especially serious, researchers are urgently seeking a new agent to replace Warfarin, a lethal anticoagulant which induces internal bleeding.

Society of Pharmacological and Environmental Pathologists is newest specialty group in medicine. Incorporated in New Jersey, society will consist of pathologists in drug industry, government, universities, and private practice to evaluate pathological changes induced by drugs, chemicals, and environmental agents. SPEP will set up registry of natural and induced diseases in laboratory animals.

New twist in solving physician shortage has been successfully sponsored by Illinois State Medical Society. More than 350 representatives of communities seeking physicians came face-to-face with 250 MDs seeking location at ISMS Physicians Job Fair conducted at Chicago. Ten physicians agreed to locations, while arrangements were made with 50 MDs to visit communities needing medical services.

Mississippi hospitals now have 23 AMA-approved allied professional training programs in six fields. With totals by institutions, these are lab assistant (1), cytoscreener (1), inhalation therapist (1), medical records librarian (1), medical technologist (9), and x-ray technician (10). New and expanded training program for allied professionals is now in the making at UMC.

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INSIGHT...

The first malpractice suit in the United States dates back to 1794. A man named Gross, whose wife had died following an operation, charged a Connecticut doctor named Guthrey with operating in a "most unskilled, ignorant and cruel manner." Gross was awarded about $120 by a sympathetic jury.

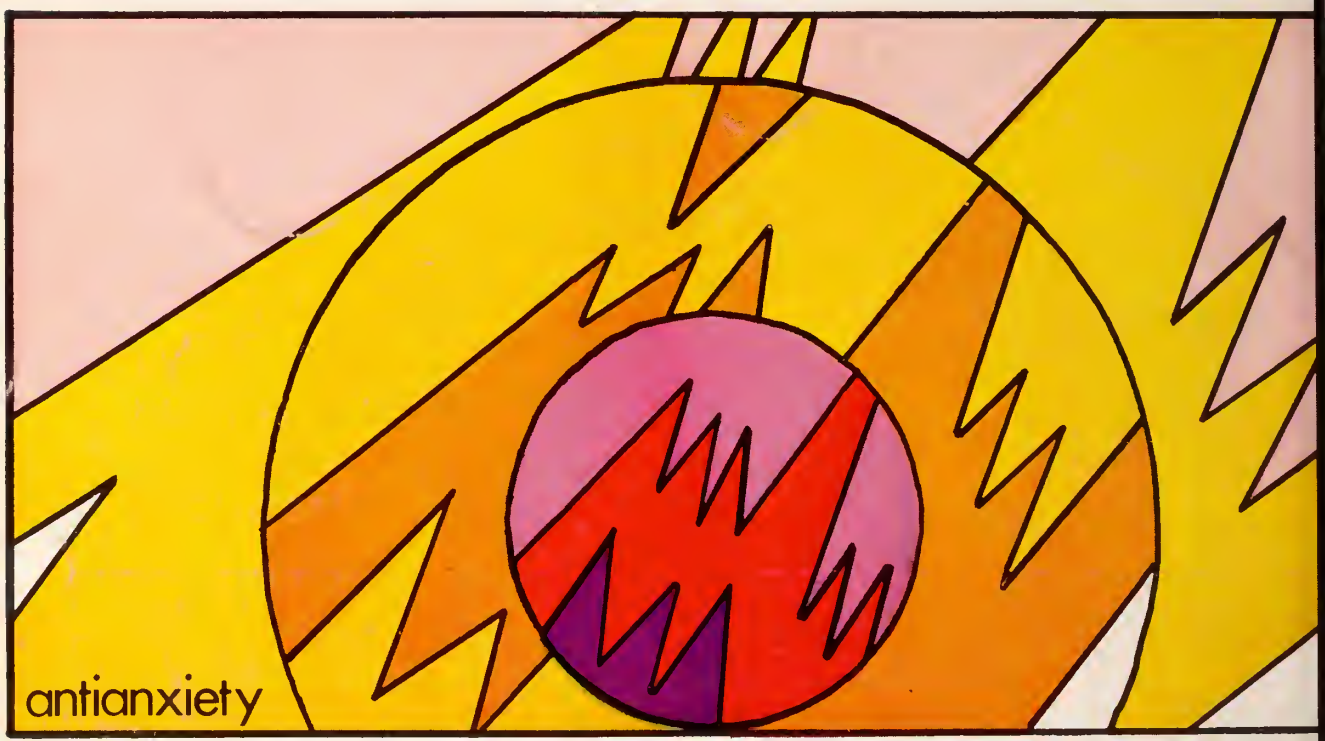
While malpractice suits have increased in frequency, claims have skyrocketed accordingly. A $100,000 suit is no longer unusual and a $3-million suit is now in litigation.

M.S.M.A. sponsored SCOPE XV $1 Million liability plan can give you the added professional liability protection you need. You also save money with your association sponsored plan.

anxiety: a time bomb

Unless "defused," anxiety may build up to an intensity that can overwhelm the patient's inner defenses. Also, in one weakened by chronic illn or surgery, excessive anxiety may provoke or aggravate symptoms and interfere with recovery.

The antianxiety action of Librium (chlordiazepoxide HCl)—used adjunctiv or alone—has demonstrated clinical usefulness in many fields of medica practice where anxiety complicates the patient's condition.



Librium®
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5-mg, 10-mg, 25-mg capsules up to 100 mg daily for severe anxiety

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Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with olcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hozardous occupations requiring complete mental alertness (e.g., operoting machinery, driving). Though physicol ond psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increose dosage; withdrawal symptoms (including convulsions), following discontinuotion of the drug and similar to those seen with barbiturates, have been reported. Use of ony drug in pregnancy, lactation, or in women of childbeoring age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxio or oversedotion, increasing gradually os needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, porticularly in use of potentiating drugs such as MAO inhibitors ond phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxicol reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients ond hyperactive aggressive children. Employ usual precautions in treatment of onxiety stotes with evidence of impending depression; suicidal tendencies mo be present and protective measures ne essory. Variable effects on blood coagulo tion have been reported very rarely i potients receiving the drug and oral ant coogulants; causol relationship hos no been established clinically.

Adverse Reactions: Drowsines ataxia and confusion may occur, esp cially in the elderly and debilitoted. Thes are reversible in most instances by prope dosage adjustment, but are also occosio ally observed at the lower dosoge range In o few instances, syncope hos been re ported. Also encountered ore isolated i stances of skin eruptions, edema, minc menstrual irregulorities, nousea and co stipation, extrapyramidol symptoms, i creosed and decreased libido—all infre quent ond generally controlled with do age reduction; changes in EEG pattern (low-voltoge fast activity) moy oppea during and ofter treatment; blood dyscra sias (including ogranulocytosis), jaundic ond hepotic dysfunction hove been re ported occosionally, making periodi blood counts ond liver function tests oc visoble during protracted theropy.

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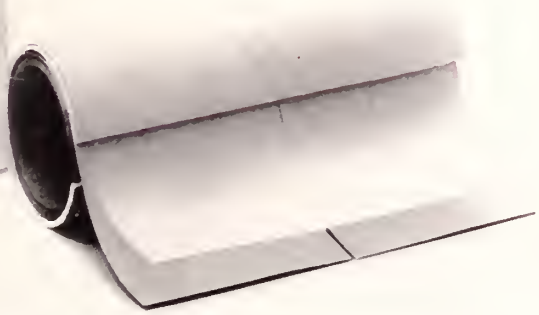
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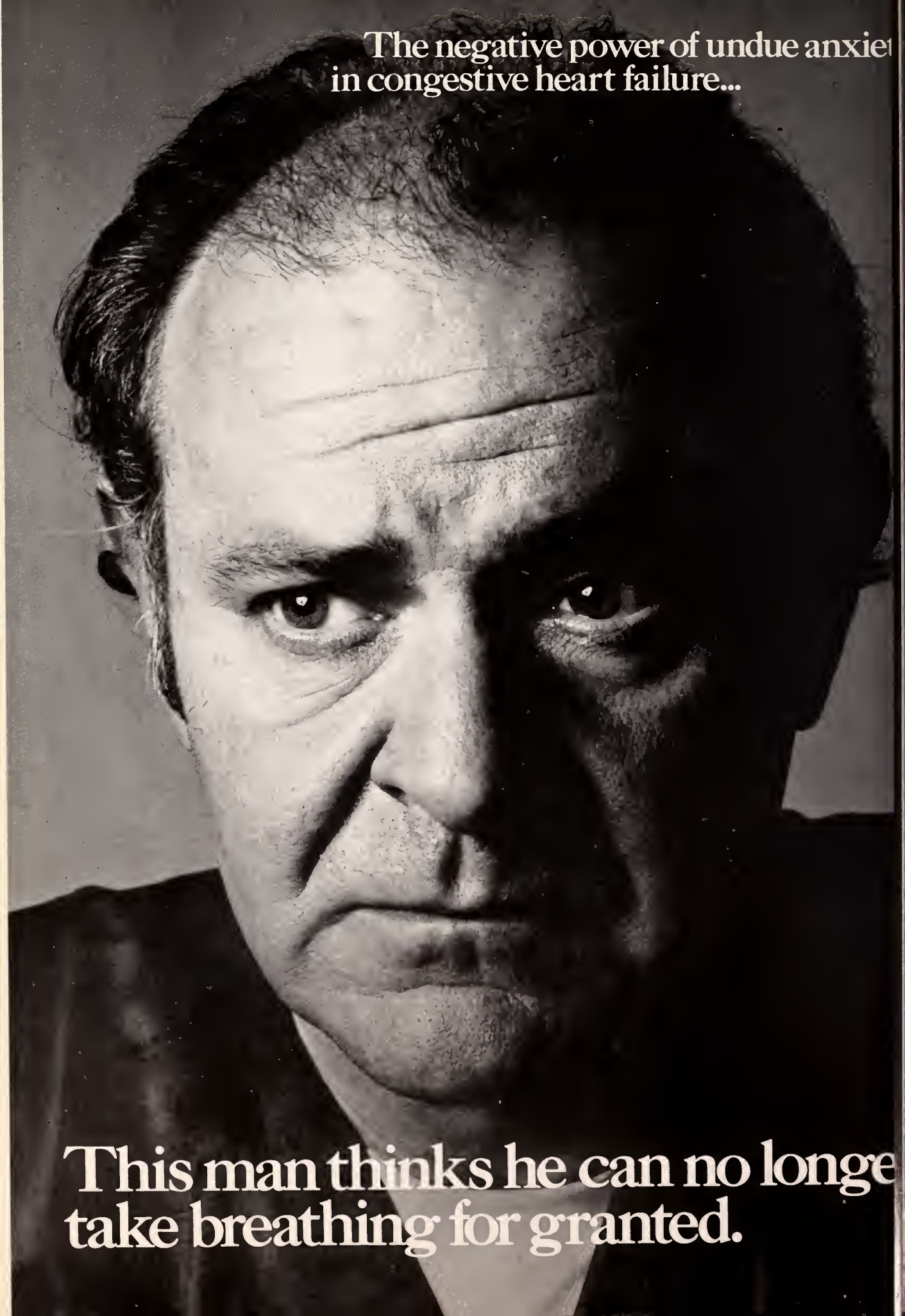
Additional information available to the profession on request.

This Month . . . The Shock Lung,

Use of Drugs Under Medicaid Program,

Linear Accelerator Radiation Therapy




The negative power of undue anxie
in congestive heart failure...
This man thinks he can no longe
take breathing for granted.

Typical of many patients with congestive heart failure, he also suffers from severe anxiety, a psychic factor that may influence the character and degree of his symptoms, such as dyspnea. His apprehension may also deprive him of the emotional calm so important in maintenance therapy.

Aid in rehabilitation

Specific medical and environmental measures are often enhanced by the antianxiety action of adjunctive Libritabs (chlordiazepoxide). Libritabs can also facilitate treatment of the tense convalescent patient until antianxiety therapy is no longer required. Whereas in geriatrics the *usual daily dosage* is 5 mg two to four times daily, the *initial dosage* in elderly and debilitated patients should be limited to 10 mg or less per day, adjusting as needed and tolerated.

Concomitant use with primary agents

Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

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Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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for severe anxiety accompanying congestive heart failure

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ACP Plans Endocrinology Course

A postgraduate course on advances in clinical endocrinology will be presented Mar. 7-10 at the Chester Keefer Memorial Auditorium of Boston University Medical Center by the American College of Physicians.

Dr. James C. Melby is director of the course which is intended to summarize recent progress in endocrinology as applied to the diagnosis and therapy of specific endocrine disorders. The program will be comprehensive in providing up-to-date information on the physiological basis of the newer clinical diagnostic tests of endocrine function.

This program is acceptable for 25 hours by the American Academy of Family Practice and the AMA "Physicians' Recognition Award."

Tuition is $80 for ACP members, residents and fellows in training and $125 for nonmembers.

For further information write the Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Medical Malpractice Course Planned

The University of Miami Law Center and School of Medicine will sponsor a legal course on medical malpractice for physicians and hospital administrators Mar. 1-4, 1972 at the Americana Hotel in Miami Beach.

Taught completely by lawyers, the Institute is designed to give registrants an in-depth introduction to their legal rights and duties in relation to their patients in the field of medical malpractice.

Registration fee is $125 and will include reference materials, a reception, and bound published proceedings of the Institute. Enrollment is limited to 400.

The program is approved for 12½ hours by the American Academy of Family Physicians and for 17 credit hours in category 4 by the American Medical Association.

For further information, write IV Medical Legal Institute, University of Miami Law Center, P. O. Box 8087, Coral Gables, Fla. 33124.

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March 1972



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CONTENTS

ORIGINAL PAPERS

The Shock Lung: Pathogenesis and Treatment 77 WATTS R. WEBB, M.D., STENNIS D. WAX, M.D., and T. MURAKAMI, M.D.

Use of Drugs Under the Mississippi Medicaid Program 81 ALTON B. COBB, M.D., DONNIE P. WILSON, and JOHN M. ABIDE

SPECIAL ARTICLES

Radiation Therapy with a Linear Accelerator 86 JERRY MORRIS, M.S.

Radiologic Seminar CXV: Tuberculosis of the Wrist 90 EDWARD L. GIEGER, JR., M.D.

EDITORIALS

The Ghost and Hoax of Chiropractic Licensure 95 Cultism in the Cloakroom

Phase II and the M.D. It's Discrimination! 97 Frozen Fees

Tragic Misadventure with Hexachlorophene 98 Foot-in-Mouth Disease

Help Is Needed on Schedule II Rx's 99 Address and Date on Rx

A Good Sleeper for Blood Banks 99 Legislative Proposal

THIS MONTH

The President Speaking 94 'The M.D. Side of Quality'

Medical Organization 113 104th Annual Session

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utions: In elderly and debilitated, limit dosage to smallest ive amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; ase gradually as needed and tolerated). Though generally commended, if combination therapy with other psycho-s seems indicated, carefully consider individual pharma-ic effects, particularly in use of potentiating drugs such as inhibitors and phenothiazines. Observe usual precautions sence of impaired renal or hepatic function. Paradoxical ons (*e.g.*, excitement, stimulation and acute rage) have eported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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NEWSLETTER

March 1972

ar Doctor:

cial Security taxes paid by working Americans in 1971 exceeded tal outlay in U.S. for all private life insurance premiums. New A tax budget for fiscal 1973 is $57 Billion. Additional tax bite ll take $18 Billion for health programs and $12.6 Billion for welre. Phenomenon of social welfare tax exceeding income tax, long fact in European nations, is becoming a reality in U.S.

Outlay for Medicare will exceed $9 Billion in fiscal 1973, and state-federal Medicaid expenditures may hit $7 Billion. Even Phase II ceiling on holding hospital cost increases to 6 per cent in calendar 1972 may not be enough to contain program in budget framework. Only 11 per cent goes to MDs.

visory bodies to Mississippi Medicaid Commission could become e majority voice of consumers under new regulations published. w guides issued by Medical Service Administration urge that at ast 51 per cent of advisory committee membership be consumers d consumer representatives, including Medicaid recipients. At esent, Mississippi advisory bodies are limited to providers.

reau of Narcotics and Dangerous Drugs has set "speed limit" for 72, ordering reduction of 80 per cent in amphetamine manufacture. ximum allowable amounts which may be legally made are 1,564 kiloams of amphetamine and 969 kilograms of methamphetamine, consired sufficient quantity for treatment of narcolepsy, hyperkinesis, d some few psychiatric disorders.

72 Regular Session of the Mississippi Legislature has had more ness than any in eight years that state association has had EMCU. re unit at Capitol averages 20 to 30 visits per legislative day th URI leading diagnosis by far. Physician participation has been perb with a Doctor-of-the-Day present every day. Some serious nditions have been seen, and one major emergency was handled.

tional seminar on care quality review was conducted at Jackson by tional Center for Health Services Research and Development. States th EMCRO (Experimental Medical Care Review Organization) projects d others saw pioneering MSMA program of physician-sponsored and naged peer review using computer-processed data. Mississippi sysn has won association national acclaim.

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Alabama Has Med Student Travel Program

A travel fellowship program designed to broaden the learning experience of Alabama medical students has been designated the Carey W. Phillips Student Travel Fellowship Fund.

Established by the Caduceus Club of the School of Medicine, University of Alabama in Birmingham (UAB), the fund was named in memory of the late Dr. Carey W. Phillips, a former president of the organization. The Caduceus Club, a division of the UAB medical alumni association, is comprised of physicians and friends of the UAB who are interested in advancing medical education in Alabama.

The Caduceus Club covers the expense of travel for students to go to a foreign medical school or hospital to conduct research or to study with noted individuals in special situations which broaden their scope of medicine beyond the UAB and the state of Alabama.

"No single student program has had a more significant impact in developing the student's perspective toward his role as a physician," noted Dr. Clifton Meador, dean of the UAB medical school. "The enthusiasm of Dr. Phillips for this program was most important to its success." The program was established by the club when Dr. Phillips was president.

Dr. Phillips, who died unexpectedly on April 11, 1971, was a native of Birmingham. At the time of his death, he was secretary of the staff, Salvation Army Home and Hospital, president-elect of the Birmingham Children's Hospital medical staff, and secretary of the Alabama Chapter of Pediatrics.

He attended Samford University, the University of Mississippi, and Vanderbilt University, served his internship at Lloyd Noland Hospital, and served pediatric residencies at the UAB Hospitals and Clinics and the St. Louis Children's Hospital. He was a lieutenant in the U. S. Navy before setting up practice here in 1955.

Since 1966, Dr. Phillips had been clinical assistant professor of pediatrics at UAB, had served as 1967 chairman of the Pediatrics Section of the Southern Medical Association, was a 1967 member of the Committee of Academic Affairs at UAB, and was president of the Birmingham Academy of Medicine.

In 1964, Dr. Phillips served as a medical service volunteer at Baptist Hospital in Obomosho, Nigeria, West Africa.

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Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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nd Efudex® (fluorouracil) 5% cream can resolve it.

it actinic, solar or senile keratoses, y regard it as "precancerous."[1,2]

al fluorouracil, considered by some dermatologists to be a major nce in the treatment of multiple solar keratoses,[3,4] offers the physi- a relatively inexpensive alternative to cryosurgery, electrodesic- n and cold knife surgery. Of the topical fluorouracils available, only ex offers 2% and 5% solution and 5% cream formulations—formula- that have proved effective in the treatment of these mutliple lesions.

al duration of therapy, 2 to 4 weeks.

ies showed that with the 2% and 5% Efudex preparations, the usual tion of therapy was only 2 to 4 weeks.[5] Other studies with topical uracil revealed that when concentrations of less than 2% were significant numbers of lesions recurred.[6]

ats the lesions you can't see, too.

erous lesions, not apparent prior to 2% and 5% Efudex therapy, fested themselves by definite reactions, while intervening skin ined relatively unaffected.[5] The early eradication of these subclini- sions (which may otherwise have undergone further progression) ably accounts for the reduced incidence of future solar keratoses in nts treated with topical fluorouracil—especially with 5% ntrations.[6]

v to identify solar keratoses.

cally, the lesion—a flat or slightly elevated brown to red-brown le—is dry, rough, adherent and sharply defined. Multiple lesions he rule.

dictable therapeutic response.

response to a typical course of Efudex therapy is usually acteristic and predictable. After 3 or 4 days of treatment, erythema ns to appear in the area of keratoses. This is followed by a moderate tense inflammatory response, scaling and occasionally moderate erness or pain. The height of this response generally occurs two s after the start of therapy and then begins to subside as treatment pped. Within two weeks of discontinuing medication, the mmation is usually gone. Lesions that do not respond should opsied.

ences: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: atment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *maceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. ta on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and , E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

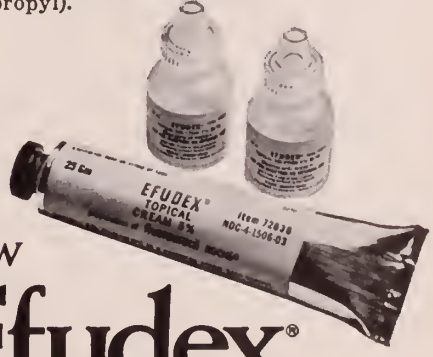
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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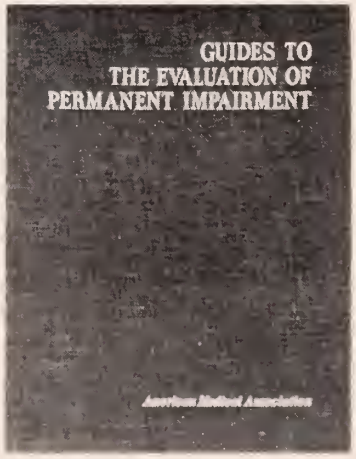
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Based on articles originally appearing in the Journal of the American Medical Association, revised and updated to include the most recent data, "Guides to the Evaluation of Permanent Impairment" is unique in its field.

We think it will quickly become a standard reference work for physicians and others who serve the handicapped.

DATELINE

Boozed Pigs Yield Alcoholism Data

Columbia, Mo. - A University of Missouri geneticist, Dr. Russell Brown, is making alcoholics out of pigs, complete with DTs and cirrhosis. Dr. Brown says pig is ideal for experimentation because of fondness for booze and human-like response to overindulgence. Physiologic mechanism in disease progress of lush porcines is astonishingly identical to human beings, researcher reports.

Psychiatry Grows in Decade of 60's

Ambler, Pa. - The National Disease and Therapeutic Index, devoted to study of private practice, says that psychiatrists now constitute 6 per cent of MDs in private practice but see only 2 per cent of patients. Because of new residency programs, psychiatry grew 36 per cent in professional manpower total from 1964 to 1970, while all MD supply grew 9 per cent. In total manpower, psychiatry stands 7th in the 20 specialties.

Use of Pot Growing, NIH Study Reports

Washington - National Institutes of Health reports that use of marijuana is widespread and growing, especially among teenagers. Usage is as much as 90 per cent in some high schools studied. Despite another report urging pot legalization, NIH studies show "reverse tolerance" to drug with retention of cannabis metabolites in user's body for several days. About 24 million Americans have used marijuana.

HIP Nixes Private Practice for MDs

New York - Nation's second largest prepaid group practice organization, Health Insurance Plan of Greater N.Y., has ordered its 1,100 participating MDs to discontinue private practice altogether and devote full time to closed panel work. Move places physicians on salaries ranging from $26,000 to $50,000 annually. HIP has 750,000 enrollees, mostly city employees, and is second only to Kaiser Permanente of California.

PSRO Amendment Goes Into Hopper

Washington - Sen. Wallace Bennett (R. Utah) has introduced again his Professional Standards Review Organization (PSRO) to H.R. 1, now before Senate. Measure differs this time in that medical association-sponsored care foundations are qualified to conduct programs. Review judgments under foundation operations are limited to physicians. Measure is supported by American Association of Foundations for Medical Care.

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Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures nec for optimal control with insulin are also necessary with O The patient on Orinase must be fully instructed: abo nature of his disease; how to prevent and detect complic how to control his condition; not to neglect dietary restri develop a careless attitude or disregard instructions rela body weight, exercise, personal hygiene, and avoidance fection; how to recognize and counteract impending hy cemia; how and when to test for glycosuria and ketonuri to use insulin; and to report to the physician immediatel does not feel as well as usual.

Caution, very close observation, and careful adjustm dose are necessary when: insulin is withdrawn during t period in order to avoid ketosis, acidosis, and coma; t diuretics are administered which may result in aggrava diabetic state and increased tolbutamide requirement, rary loss of control, or even secondary failure; treating p with impaired hepatic and/or renal function and debilitate nourished, or semistarved patients in order to avoid severe glycemia which may require corrective therapy over days; and treating patients with severe trauma, infection, gical procedures where temporary return to insulin or a of insulin may be necessary. Response to tolbutamide is ished in patients receiving therapy with beta blocking

As some diabetics are not suitable candidates, it is es that the physician familiarize himself with the indications of application, and selection of patients for therapy.

Patients must be under continuous medical supervisio during the initial test period should communicate with the

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daily, and during the first month report at least once weekly hysical examination and definitive evaluation. After a month, inations are recommended monthly or as indicated. Appance of ketonuria, increase in glycosuria, unsatisfactory ring or persistent elevation of blood sugar, or failure to n and hold clinical improvement indicate nonresponsive- to Orinase (tolbutamide). Orinase does not obviate need for taining standard diet regulation. Uncooperative patients ld be considered unsuitable for therapy. Prescriptions should efilled only on specific instruction of physician. In treating asymptomatic diabetic patients with abnormal glucose ance, glucose tolerance tests should be obtained at three- x-month intervals. Orinase is not an oral insulin or a substi- for insulin and must not be used as sole therapy in juvenile etes or in diabetes complicated by acidosis or coma where in is indispensable.

phenformin is prescribed in combination with Orinase, appriate package literature should be consulted.

dverse Reactions: Severe hypoglycemia, though uncommon, occur and may mimic acute neurologic disorders such as bral thrombosis. Certain factors such as hepatic and renal ase, malnutrition, advanced age, alcohol ingestion, and nal and pituitary insufficiency may predispose to hypogly- a and certain drugs such as insulin, phenformin, sulfona- s, oxyphenbutazone, salicylates, probenecid, monamine ase inhibitors, phenylbutazone, bishydroxycoumarin, and yramidol may prolong or enhance the action of Orinase and ease risk of hypoglycemia. Orinase long-term therapy has reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia.

Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

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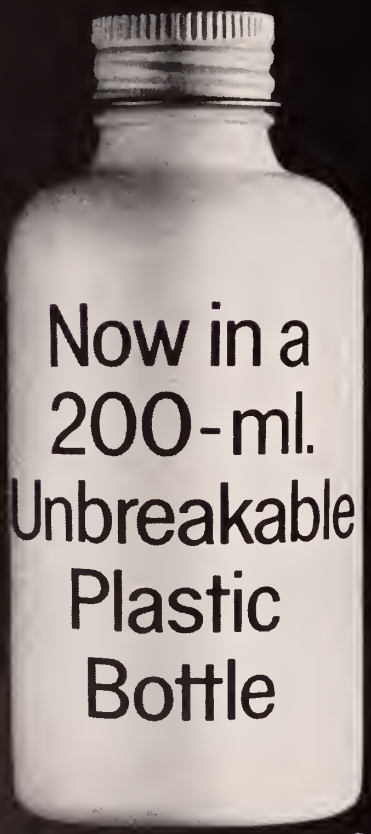
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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
March 1972, Vol. XIII, No. 3

ORIGINAL PAPERS

The Shock Lung: Pathogenesis and Treatment

WATTS R. WEBB, M.D., STENNIS D. WAX, M.D., and T. MURAKAMI, M.D.
Syracuse, New York

In recent years rapid evacuation, improved resuscitation, and accurate monitoring of severely traumatized patients have led to the recognition of a serious and often fatal pulmonary condition which theretofore either went undiagnosed or was concealed by the death of the patient. This pulmonary complication has been called "Shock Lung" or more comprehensively, acute Respiratory Distress Syndrome. In the various clinical situations many varied factors play a role such as microemboli of blood elements, overinfusion of crystalloids or colloids, overtransfusion, oxygen toxicity, problems with ventilation, fat emboli, circulating toxic vasoactive substances, neurogenic factors and lung hypoperfusion with changes in the surfactant. The authors present a rationale of therapy to modify these precipitating and aggravating factors.

During the past few years the outstanding achievement of rapid evacuation in Vietnam and the marked improvements in methods of resuscitation, monitoring and therapy of the severely traumatized patient led to the recognition of serious and often morbid pulmonary conditions which previously were usually obscured by the death of the patient.[1] Even in the absence of chest injuries, these patients may show progressive respiratory insufficiency which has been termed "congestive atelectasis," "shock lung" or the more comprehensive term, acute Respiratory Distress Syndrome.[2] It has been estimated that between one-third and one-half of those patients dying in intensive care units throughout this country die from such pulmonary derangements. Radiologically this syndrome may resemble acute pulmonary edema, fat embolism, irradiation damage, bacterial or fungal pneumonitis or blast injury, while clinically it is characterized by progressive acute pulmonary insufficiency.

The clinical course is characterized by progressive dyspnea, tachypnea, restriction of thoracic motion, hypotension and resistant cyanosis with decreasing arterial oxygen tensions. The clinical syndrome has been subdivided into four phases by Moore:[3]

Phase I. Injury, resuscitation, and alkalosis. The massive injury patient adequately resuscitated by multiple transfusions develops mild metabolic acidosis from the infusion of citrate and hypoxic acidosis from lactic acidemia. Alkalosis then develops from hypocapnea from increasing ventilation and from sodium bicarbonate infusions.

Presented before the Section on Surgery, Mississippi State Medical Association, Biloxi, May 4, 1971.
From the Department of Surgery, State University of New York, Upstate Medical Center, Syracuse.

Phase II. Stabilization and beginning respiratory distress. As cardiac output returns to normal and tissue perfusion increases the arterial lactate declines. However, hyperventilation continues with a falling carbon dioxide. Pulmonary arteriovenous shunting develops leading to a decline in the arterial pO2.

Phase III. Pulmonary insufficiency. The shunting increases further and becomes resistant to oxygen therapy. Tracheostomy, assisted ventilation and increased oxygen in the inspired air may have the undesirable effects of drying, contamination and presence of a foreign body in the trachea. Pulmonary findings may become apparent to ausculation.

Phase IV. Bradycardia and asystole. Progressive hypoxemia, lactate acidemia, decreasing buffer base, falling pH, rising carbon dioxide and bacterial colonization ultimately lead to bradycardia and asystole.

The work of many investigators has confirmed that congestive changes occur in the lungs of humans[4] as well as in experimental animals[5] even without any other complicating factors. In the various clinical situations many factors play a role such as overinfusion of crystalloids or colloids, overtransfusion, oxygen toxicity, inadequate ventilation, fat emboli, changes in surfactant, neurogenic factors and circulating vasoactive substances. Multiple transfusions deliver a large volume of clot since present commercial blood filters have a pore size of 170 u. Thus any clot less than this size is delivered intravenously, and each unit of blood contains one to five ml. of small platelet, leucocytic and red cell thrombi. The lung acts as a screen for such thrombi and also for vasoactive peptides, since it is the only organ in the body which is perfused by all circulating blood. Also it is unique in being the first capillary bed for oxygen and for absorbed foods and other substances from the liver.

TABLE 1

INDICATIONS FOR RESPIRATORY SUPPORT

	Oxygen Rx Chest Physio Rx	*Intubation Ventilation*
Respiration rate	25-35/min	> 35
Vital capacity	30-15 ml/Kg	< 15
pO2	70 (40 per cent O2)	< 70
pCO2	45-60	> 60

Physiologically there can be only a limited scope of response—manifested by either mechanical changes or changes in diffusion (gas exchange). During shock there is a fall in pulmonary arterial and right and left atrial pressures. However, pressures in the small pulmonary veins remain elevated leading to higher back pressure in the capillaries and capillary congestion.[6, 7] This is further increased by excessive infusions or transfusions.

The work of breathing and the energy cost of expanding the lung increase appreciably.[8] Failure to stimulate deep breathing leads to multiple areas of microatelectasis, loss of surfactant, decreasing lung compliance and a falling arterial pO2.[9] In addition, inactivity of the patient permits progressive congestion of the dependent lung. This increases airway resistance and decreases lung compliance, both of which increase the work of breathing. Retained secretions result in bronchial obstruction and bronchoconstriction, again increasing airway resistance. The oxygen cost of breathing may be more than doubled following abdominal surgery alone.

With progressive microatelectasis there is increasing arteriovenous shunting in the lung. Siegel and DelGuercio reported that in older patients there may be 11 per cent arteriovenous admixture through the lungs before operation, in nonseptic shock up to 21 per cent; in septic shock up to 38 per cent; following cardiac arrest up to 31 per cent; and in shock due to fat emboli there might be 60 per cent shunting.[10]

RATIONALE OF THERAPY

The rationale of therapy in any patient developing pulmonary complications includes: (1) prevention of alveolar collapse; (2) maintaining ventilation; (3) preventing and treating infection; and (4) treating the underlying pathology to improve perfusion and minimize subsequent cellular injury.

The most important principle is that of accuracy of therapy, such as replacement of adequate blood when blood has been lost, and electrolyte solutions or colloids as indicated. In addition, the accuracy of administration of oxygen in the inspired atmosphere and control of blood gases must be assured.

An indwelling endotracheal tube appears preferable to a tracheostomy, at least early, to avoid the effects of drying, infection, and more incisions caused by the tracheostomy. However, most clinics prefer to convert to the tracheostomy if support is needed for more than 48-72 hours. Adequate humidity and mucolytic agents are important in all situations, but particularly when an endotracheal or tracheostomy tube is being used. Adequate moisture can be added to the inspired air

only by heating the mist to body temperature or by use of ultrasonic nebulizers.

In situations where excessive fluids have been administered or there is inflammatory edema of the lung—as in fat embolism—the newer loop diuretics such as furosamide and ethacinic acid are particularly effective in aiding the removal of the edema fluid by excretion of the excess.

In most patients, a pO2 of 70-80 mm. of mercury is adequate and all that should be sought. Any concentration of oxygen in the inspired air above 40 per cent, if continued for longer than a few minutes, will begin to have toxic effects on pulmonary epithelium and endothelium. Obviously in some instances it is imperative to utilize high concentrations of oxygen but this should be reduced as rapidly as possible.

TABLE 2
RESPIRATORY THERAPY

Humidity and mucolytic agents
Oxygen enriched atmosphere
Postural changes
Fluid restriction and diuretics
Corticosteroids
Intubation—Tracheostomy
Slow deep respirations
Positive and expiratory pressure (PEEP)
Antibiotics (or indication)

An expiratory retard with a positive end expiratory pressure (PEEP) of 5-15 cm. of water can be achieved by some of the modern respirators or very simply by leading the expiratory tube 5-15 cm. below the surface of a bottle of sterile water. This alone is very effective in preventing the progressive microatelectasis which causes arteriovenous shunting in the lung. While this may slightly decrease the blood flow to the thorax and through the lungs in patients with hypovolemia, this effect can easily be overcome by restoring blood volume to normal. In addition, each patient should have a deep forceful inspiration (sigh) several times an hour and a change in posture at least hourly to prevent the deleterious effects of static hypotension.

Our studies with direct microscopic observations of the lung and its capillary congestion during shock with movie films have demonstrated the beneficial effects of massive doses of corticosteroids (prednisone 30 mg. per kg.) in preventing sludging of the blood and alveolar congestion. There is minimal danger of this increasing infection since the steroid is administered only during the first day of therapy. Also low molecular Dextran has a similar effect in resuscitation from profound shock. It should be remembered that more than 500 ml. of low molecular Dextran given each day may lead to bleeding problems and interferes with subsequent cross matching for transfusions.

MONITORING

Monitoring should include a daily weight check, chest x-ray, an accurate intake and output, hematocrit, plasma electrolytes, blood gases, pH and vital capacity with an estimate of the effective compliance. This later can easily be gauged by the pressure required for the respirator to deliver the selected volume of inspiratory gas. Additional measures which may be useful at times include estimates of the alveolar-arterial oxygen gradient with the patient breathing 100 per cent oxygen and the ratio of dead space to tidal volume (computed from nomograms from the arterial pCO2 and the end expiratory pCO2).

SUMMARY

The acute respiratory distress syndrome is seen frequently both in traumatized and operated patients particularly if subjected to hemorrhage. Some of the pulmonary problems are iatrogenic from the misuse of blood, crystalloids, oxygen, vasopressors, sedation and immobility. Some relate to the blast effect from injuries at sites distant from the thorax. Other causative factors are metabolic, secondary to a low-flow state and some are secondary to hemorrhagic hypotension alone. The pulmonary capillary bed is a principal target end-organ in shock, whether affected by the toxic action of oxygen or fat, by the obstructive action of platelet and leukocyte clots or by changes in balance between perfusion pressures and osmotic pressures. A rationale of therapy has been presented to modify these precipitating and aggravating factors. ★★★

750 East Adams Street (13210)

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DEPENDS ON HOW YOU LOOK AT IT

At the Mayo Clinic in Minnesota you are bound to hear about the time a bustling woman stopped Dr. Will Mayo and asked, "Are you the head doctor here?"

"No, Madam," replied Dr. Will. "My brother is the head doctor. I'm the belly doctor."

Use of Drugs Under the Mississippi Medicaid Program

ALTON B. COBB, M.D., DONNIE P. WILSON and
JOHN M. ABIDE
Jackson, Mississippi

THE MISSISSIPPI MEDICAID Commission began payments on July 1, 1970, for legend drugs, insulin and a limited number of over-the-counter drug products when prescribed by a physician or dentist. Any legend drug prescribed by a physician or dentist, except those containing amphetamines or vitamins, was covered under reimbursement to over 700 participating pharmacies and 13 dispensing physicians. Among the legend drugs, 27 were covered only as generics. The purpose of this report is to review actual utilization patterns, costs, etc., of drugs under a relatively unrestricted program for a rather well defined population sub-group.

The Mississippi Medicaid Program has a contract with Mississippi Hospital and Medical Service (Blue Cross-Blue Shield) for claim payments, computer informational storage, retrieval, and reporting systems to satisfy Federal and State requirements. This includes program reports necessary for planning and administration of the Medicaid Program.

Near the end of the program's first year of operation, a series of special program reports were prepared for program review, evaluation, and planning of possible program changes. These reports covered the period from July 1, 1970, through Feb. 19, 1971.

The first part of this paper summarizes information gathered from these special reports and includes: (1) Recipient usage of drugs by eligibility classification; (2) Frequency of individual drug usage by overall ranks; and (3) A breakdown of drug utilization by race and sex.

Director, Mississippi Medicaid Commission.
Donnie P. Wilson and John M. Abide are students at the University of Mississippi School of Medicine.

Individuals eligible for benefits under the program by public assistance categories, per cent eligible by category, and payments for drugs during the period July 1, 1970, through Feb. 19, 1971, are shown in Table 1.

The authors present patterns and rates of prescribed drug usage under the relatively unrestricted Medicaid drug program. Utilization rates are described for categories of program eligibles, by race and sex groupings, and by a "top 50" drug usage listing.

It is apparent from Table 1 that the aged and disabled represent the largest users of drugs. Each of these categories used almost twice the percentage of drugs as their proportionate share of the total eligible pool.

All drugs used under the program are classified into 38 groups or therapeutic classes. In addition, all non-coded legend and all coded injectables represent a drug group. In Table 2, the 10 most popular classes of drugs are shown for each category of eligibles.

Usage within each class by eligibility categories generally followed expected patterns; i.e., children used most of the anthelminthics (94 per cent) and the disabled and aged used all (100 per cent) of the anticoagulants.

Analgesics were the first or second most frequently used class of drugs by each group of adult recipients (Old Age Assistance, Aid to the Blind, and Aid to the Permanently and Totally Disabled). Only among the children did analgesics fall to third place, being replaced by antibac-

terials and the class that included over-the-counter drug products.

Among the disabled and the aged, the second leading class of drugs was the antihypertensive agents. This is undoubtedly due to the relatively high prevalence of hypertension among these groups.

Only for the children (Aid to Dependent Children) did the antibacterials represent the leading class; antibacterials ranked third, however, for the blind and disabled, but ranked only sixth for the aged.

TOP RANKING DRUG

The top ranking drug by amount spent was Indocin 25 mg capsules. This drug ranked third in number of prescriptions. The top ranking drug by number of prescriptions was Darvon Compound—65 capsules. Darvon Compound—65 capsules ranked second in amount spent.

Table 3 shows the ranking of the top 50 drugs by amount and also shows the ranking of these 50 drugs by number of prescriptions.

The 50 drugs listed in Table 3 accounted for 38.7 per cent of all drug payments from July 1, 1970, through Feb. 19, 1971. This amounted to $1,736,894.59.

It is interesting to note that among the 10 leading drugs ranked by total amount paid, five drugs are specified as "not recommended" or as "irrational mixtures" by the *AMA Drug Evaluations*—1971. Also, one drug among the 10 has been classified as "possibly ineffective" by the Food and Drug Administration. This indicates an overall negative relationship between popular usage of drugs and the evaluation of their efficiency and safety by the AMA Council on Drugs and the FDA. It is suggested that this represents a fertile area for professional education.

TABLE 2

TEN MOST FREQUENTLY PRESCRIBED DRUG CLASSIFICATIONS, NUMBER OF PRESCRIPTIONS AND AMOUNT OF EXPENDITURES BY PROGRAM CATEGORY, JULY 1, 1970-FEB. 19, 1971

Drug Classification	*Prescriptions*	*Expenditures*
Old Age Assistance		
Analgesics	83,393	$338,705.35
Antihypertensive agents	80,854	353,875.89
All non-coded legend and all coded injectables*	79,103	322,491.60
Gastrointestinal agents	64,232	199,662.93
Diuretics	56,572	188,908.75
Antibacterials	54,292	254,807.21
Cardiac agents	43,497	99,112.41
Sedative-hypnotics	42,600	92,959.43
Peripheral vasodilators	36,602	184,268.57
Hypoglycemics	35,642	168,642.85
Aid to the Blind		
All non-coded legend and all coded injectables*	2,164	$ 8,408.24
Analgesics	1,767	6,030.77
Antibacterials	1,519	7,530.38
Gastrointestinal agents	1,360	4,086.12
Antihypertensive agents	1,223	5,626.60
Diuretics	1,118	4,241.00
Hypoglycemic agents	1,012	4,475.52
Antianxiety agents	924	4,810.78
Sedative-hypnotics	906	1,998.18
Cardiac agents	412	955.59
Aid to Permanently and Totally Disabled		
Analgesics	34,467	$134,114.67
Antihypertensive agents	25,569	117,943.18
Antibacterials	22,403	104,746.65
Gastrointestinal agents	20,064	63,038.71
Sedative-hypnotics	17,469	37,945.77
Antianxiety agents	16,540	85,963.09
Diuretics	16,463	56,516.71
Hypoglycemic agents	16,093	77,367.72
Antipsychotic agents	12,653	81,448.40
Cardiac agents	11,247	26,031.36

TABLE 1

NUMBER OF PERSONS ELIGIBLE FOR MEDICAID AND EXPENDITURES FOR DRUGS WITH PERCENTAGE DISTRIBUTION BY PROGRAM CATEGORY, JULY 1, 1970-FEB. 19, 1971

Program	*Eligibles* NUMBER	PER CENT	*Expenditures* AMOUNT	PER CENT
Old Age Assistance	74,943	37.6	$2,977,498.94	66.5
Aid to the Blind	2,126	1.1	62,782.36	1.4
Aid to Permanently and Totally Disabled	22,030	11.1	1,119,810.70	25.0
Aid to Dependent Children	99,951	50.2	317,070.43	7.1
Total	199,050	100.0	$4,477,162.43	100.0

Aid to Dependent Children

Antibacterials	35,566	$141,519.95
All non-coded legend and all coded injectables*	14,437	49,489.86
Analgesics	6,416	14,450.25
Antihistaminics	5,178	12,872.50
Antitussives	4,476	10,141.35
Topicals	4,285	11,842.40
Antiemetics	4,185	10,714.09
Gastrointestinal agents	3,654	9,047.27
Anthelmintics	2,547	6,590.65
Nasal decongestants	1,925	4,864.41

* This group contains drugs from all therapeutic classes and so has no comparative relationship to other classes in this table.

TABLE 3

RANK OF TOP 50 DRUGS BY AMOUNT PAID AND BY NUMBER OF PRESCRIPTIONS, JULY 1, 1970-FEB. 19, 1971

Drug Name	*Rank* AMOUNT PAID	RX
Indocin 25 mg capsules	1	3
*Darvon Compound—65 capsules	2	1
Pavabid capsules	3	7
Orinase tablets 500 mg.	4	6
DBI-TD capsules	5	12
Valium 5 mg tablets	6	9
*Aldoril 25 tablets	7	16
*Salutensin tablets	8	5
*†Antivert tablets	9	4
*Ser-ap-es tablets	10	10
Indocin 50 mg capsules	11	34
Lasix 40 mg tablets	12	8
Al and Hydroxide Gel. Susp.	13	2
Meprobamate 400 mg tablets	14	11
Diabinese 250 mg tablets	15	19
Librium 10 mg capsules	16	27
Hydropres 50 tablets	17	18
Cyclospasmol 200 mg capsules	18	39
Aldomet 250 mg tablets	19	31
Hydropres—25 tablets	20	20
Dyazide capsules	21	15
Mellaril 25 mg tablets	22	45
Tetracycline 250 mg capsules	23	13
*Cerespan capsules	24	58
*Aldoril-15 capsules	25	41
Regroton tablets	26	23
Hydergine Sublingual tablets 0.5 mg	27	49
Arlidin 6 mg tablets	28	51
Diupres—500 tablets	29	43
Diuril 500 mg tablets	30	22
Darvon—65 mg capsules	31	29
Peritrate SA 80 mg tablets	32	56
Ampicillin capsules 250 mg	33	69
Triavil 2-25 tablets	34	89
NegGram 500 mg tablets	35	103
Phenobarbital 30 mg tablets	36	14
*Donnatal tablets	37	21
*†Equagesic tablets	38	57
Trinsicon capsules	39	53
Butazolidin Alka capsules	40	47
Dilantin 100 mg capsules	41	28
Macrodantin 50 mg capsules	42	65
Quinidine Sulfate 200 mg (caps or tabs)	43	50
Iletin Insulin NPH 80μ/cc 10 cc	44	44
Mellaril 50 mg tablets	45	95
Vasodilan 10 mg tablets	46	71
Diupres—250 tablets	47	42
HydroDiuril 50 mg tablets	48	37
Theragran Hematinic tablets	49	54
Tolinase 250 mg tablets	50	97

* Drugs listed as "not recommended" or as "irrational mixtures" by *AMA Drug Evaluations*—1971.

† Drugs listed as "possibly ineffective" by FDA as of Nov. 1, 1970.

The second part of this paper reviews overall use of drugs under the program between Jan. 1, 1971, and May 31, 1971. In Table 4, the actual number of eligibles using drugs is shown as "recipients." During this period, a little over 100,000 Medicaid eligibles obtained drugs under the program; this represents about 50 per cent of the total eligibles. Among those receiving drugs, the average prescriptions per recipient as shown in Table 4 reveal that white females had the highest use rate, followed by white males, nonwhite females and nonwhite males.

DIFFERENCES PER CATEGORY

Differences in the number of prescriptions received per recipient varied considerably in the program categories. Prescriptions per recipient for the Old Age Assistance recipients were more than four times those for the Aid to Dependent Children recipients (see Table 5).

Utilization rates were much higher in whites of each category (see Table 6). During the period Jan. 1, 1971-May 31, 1971, 68.3 per cent of total white eligibles used drug benefits and among all nonwhite eligibles, 41.3 per cent used drug benefits. In each category of program eligibility, utilization rate for drugs under Medicaid was highest among the whites. The smallest differences between the races for drug utilization were for the blind and dependent children.

Evaluation of data on average number of prescriptions per eligible person during the period Jan. 1, 1971-May 31, 1971, as shown on Table 7, reveals that whites averaged 11.5 prescriptions while nonwhites averaged 3.2 for the over 200,000 total eligibles. Again, in all categories, whites showed much higher drug usage.

TABLE 4

NUMBER OF RECIPIENTS OF PRESCRIBED DRUGS, NUMBER OF PRESCRIPTIONS AND AVERAGE PRESCRIPTIONS PER RECIPIENT BY RACE AND SEX, JANUARY-MAY, 1971

Race and Sex	*Number of Recipients*	*Number of Prescriptions*	*Average Prescriptions per Recipient*
White males	13,533	208,311	15.4
White females	23,274	410,120	17.6
Nonwhite males	26,599	186,357	7.0
Nonwhite females	38,822	323,885	8.3
Total	102,228	1,128,673	11.0

TABLE 5

NUMBER OF RECIPIENTS OF PRESCRIBED DRUGS, NUMBER OF PRESCRIPTIONS AND AVERAGE PRESCRIPTIONS PER RECIPIENT BY PROGRAM CATEGORY, JANUARY-MAY, 1971

Program Category	*Number of Recipients*	*Number of Prescriptions*	*Average Prescriptions per Recipient*
Old Age Assistance	53,118	746,885	14.1
Aid to the Blind	1,234	15,185	12.3
Aid to the Permanently and Totally Disabled	17,577	269,938	15.4
Aid to Dependent Children	30,299	96,665	3.2
Total	102,228	1,128,673	11.0

TABLE 6

NUMBER OF ELIGIBLES, NUMBER OF RECIPIENTS OF PRESCRIBED DRUGS AND UTILIZATION RATES FOR WHITES AND NONWHITES BY PROGRAM CATEGORY OF ELIGIBILITY, JANUARY-MAY, 1971

Program Category	*Eligibles**		*Recipients*		*Utilization Rate*	
	WHITES	NONWHITES	WHITES	NONWHITES	WHITES	NONWHITES
OAA	32,042	46,110	25,393	27,725	79.2	60.1
AB	691	1,468	428	806	61.9	54.9
APTD	9,290	15,157	7,414	10,163	79.8	67.1
ADC	11,835	95,759	3,572	26,727	30.2	27.9
Total	53,858	158,494	36,807	65,421	68.3	41.3

* Based on data from Mississippi Department of Public Welfare as of September 1969.

TABLE 7

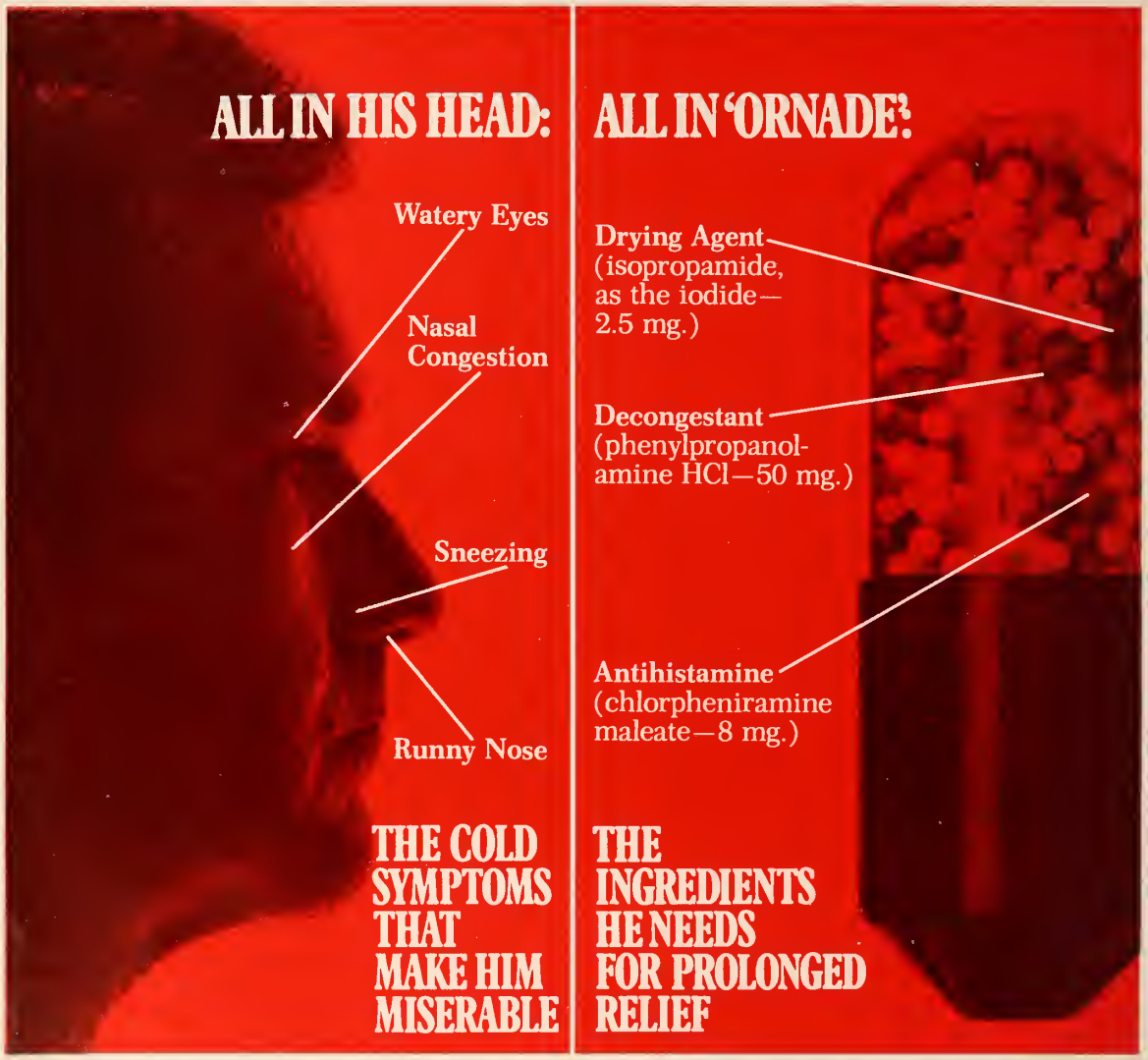
NUMBER OF PRESCRIPTIONS, NUMBER OF ELIGIBLES AND AVERAGE PRESCRIPTIONS PER ELIGIBLE BY RACE AND PROGRAM CATEGORY, JANUARY-MAY, 1971

Program	*Prescriptions*		*Eligibles*		*Average per Eligible*	
	WHITES	NONWHITES	WHITES	NONWHITES	WHITES	NONWHITES
OAA	454,514	292,371	32,042	46,110	14.2	6.3
AB	6,631	8,554	691	1,468	9.6	5.8
APTD	142,824	127,114	9,290	15,157	15.4	8.4
ADC	14,462	82,203	11,835	95,759	1.2	.9
Total	618,431	510,242	53,858	158,494	11.5	3.2



DBI phenformin HCl
tablets of 25 mg.
DBI-TD phenformin HCl
capsules of 50 and 100 mg.

Do not give insulin without first checking blood and urine sugar.



Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Upper respiratory congestion and hypersecretion associated with the common cold; acute and chronic sinusitis; vasomotor rhinitis; allergic rhinitis (hay fever, "rose fever," etc.).

Contraindications: Hypersensitivity to any component; concurrent MAO inhibitor therapy; severe hypertension; bronchial asthma; coronary artery disease; stenosing peptic ulcer; pyloroduodenal or bladder neck obstruction. Children under 6.

Warnings: Advise vehicle or machine operators of possible drowsiness. Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy: In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur

Effect on PBI Determination and I^{131} Uptake. Isopropamide iodide may alter PBI test results and will suppress I^{131} uptake. Substitute thyroid tests unaffected by exogenous iodides.

Precautions: Use cautiously in persons with cardiovascular disease, glaucoma, prostatic hypertrophy, hyperthyroidism.

Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth; nervousness; or insomnia. Also, nausea, vomiting, epigastric distress, diarrhea, rash, dizziness, weakness, chest tightness, angina pain, abdominal pain, irritability, palpitation, headache, incoordination, tremor, dysuria, difficulty in urination, thrombocytopenia, leukopenia, convulsions, hypertension, hypotension, anorexia, constipation, visual disturbances, iodine toxicity (acne, parotitis).

Supplied: Bottles of 50 capsules.

SK&F *Smith Kline & French Laboratories*

Trademark

ORNADE® SPANSULE®

brand of sustained release capsules

Each capsule contains 8 mg. of Teldrin®(brand of chlorpheniramine maleate); 50 mg. of phenylpropanolamine hydrochloride, 2.5 mg. of isopropamide, as the iodide.

UNCOMMON RELIEF FOR COLD SYMPTOMS

OR-203

SUMMARY

Patterns and rates for prescribed drug usage under a relatively unrestricted Medicaid drug program are presented. Utilization rates are described for categories of program eligibles and by a "top 50" drug usage listing. In addition, usage rates are detailed by race and sex groupings.

The relatively high usage of several drugs listed as "possibly ineffective" by the FDA or as "not recommended" or as "irrational mixtures" by *AMA Drug Evaluations*—1971 suggests a need for professional education on drug usage.

The higher usage rate for white eligibles is probably due to a number of factors, including long-standing differences in the accessibility and usage of health services between whites and blacks. ★★★

2906 North State Street (39216)

Subsequent to the period covered by this study, a limited list of covered drugs (formulary) was adopted.

UNEXPECTED TRUTH

Newspaper editors write some weird headlines, like this one—
MAN HIT BY TRAIN CRITICAL. You really can't blame him.

Radiation Therapy With a Linear Accelerator

JERRY MORRIS, M.S.
Jackson, Mississippi

The author, a radiation physicist, describes the linear accelerator used at the University of Mississippi Medical Center to treat various malignancies with high energy radiation. He explains the operation and maintenance of this complicated machine and compares it to the cobalt teletherapy units.

THE RADIATION THERAPY Division of the Department of Radiology, University of Mississippi Medical Center, Jackson, has treated various types of malignancies for over a year with high energy radiation emanating from a linear accelerator. With the exception of problems incurred during the "breaking in" period, the operation and maintenance of this sophisticated piece of machinery has been relatively simple.

The unit, owned by the medical center, is manufactured by Varian Associates, Palo Alto, Cal., and is capable of producing 4 million volt x-rays (see Figure 1). Rotational capability at a source-to-tumor distance of 80 cm is also available. After an acceleration of 4 MeV, electrons strike a 2 mm tungsten target. A closed cooling system of recirculating, distilled water removes heat from the target. A maximum field size of 32 x 32 cm at a source-to-skin distance of 80 cm may be achieved with the motorized depleted uranium collimators. Larger field sizes are attainable at greater treatment distances. The head may be rotated through an angle of 180 degrees. A fully motorized treatment couch, coupled with four laser beam markers, make for accurate and simple positioning of patients.

Since the advent of Cobalt 60 teletherapy units in 1951, supervoltage radiation has become increasingly available for medical uses. Cobalt 60 radiation has an average energy of 1.25 MeV which provides the advantage over orthovoltage radiation of delivering the maximum dose beneath the skin's surface. With orthovoltage radiation, the skin received the maximum dose and therefore, limited the dose that one could deliver to the tumor site. Hence, much higher doses of radiation may be given with the use of Cobalt 60.

From the Department of Radiology, University of Mississippi Medical Center, Jackson.

However, there were problems associated with the use of cobalt units. First, was the hazard of a tremendous amount of radioactivity (3000-5000 curies) located on the premises of a clinic or hospital. Although shielding of the radioactive sources was accomplished with acceptable thicknesses of lead surrounding the source, some of the rays still penetrated into occupied areas. Another hazard was the possibility that some of the radioactive material may escape confinement into the environment. A third drawback was the fact that a source which is emitting radiation is also becoming less active or weaker with time, and will eventually decay to the point that replacement is necessary.

None of these problems exist with the linear accelerator since it is activated electrically and may be completely shut down by a "flip of the switch." During actual treatment of a patient, there exists the potential hazard that some scattered radiation may enter an occupied area; but this has been reduced to practically zero probability by interlocks on entrance doors and adequate shielding around the room to intercept most of the radiation. Safety is a prime consideration in the design of the radiation therapy room.

The source of radiation in an accelerator is

high speed electrons which are suddenly stopped by a high density material known as the target. In diagnostic and orthovoltage (250 KV range) type x-ray units, electrons are submitted to the desired potential difference and thereby accelerated to the target (anode). However, as one continues to impress higher voltage through a conducting wire, more and more energy is lost via the electric field outside the wire. A voltage is eventually reached at which point it becomes impractical to carry electrical energy through a wire.

The linear accelerator provides other means for accelerating electrons and heavier particles such as protons, deuterons, etc. The source of power, in this instance, is a magnetron which produces microwave power, i.e. electromagnetic radiation in the 3000 H_z range. This microwave radiation is made to travel from its source through ducts to the accelerating tube. The accelerating tube consists of an evacuated area filled with a series of copper cells with increased spacing as one proceeds down the tube. The effect of the cells is to interfere with the microwave radiation as it passes down the accelerating structure causing its effective velocity to be reduced initially but increasing as the spacing of the copper cells increase.

By injecting electrons into the system at the proper moment, they can be made to travel with the microwave radiation picking up speed as it travels down the tube. The longer the tube the greater the energy that the electrons will acquire. The Clinac 4 provides 4.0 million volts by acceleration through a distance of one foot. This allows for the construction of a relatively compact unit with rotational capability.

Other notable features of the 4 MeV linear accelerator are: (1) High dose rate (350-400 rads/minute at a distance of 80 cm); (2) Maximum dose occurs at 1.0 cm beneath skin surface; (3) Treatment may be terminated by any of three methods—preset dose, preset time, or, in the case of arc therapy, by a preset angle; (4) A flattening filter is located in the beam so that, at a 10.0 cm depth in a phantom, the dose across the beam is constant; (5) Penumbra is minimal due to small target.

A high dose rate or output means less time that the patient must remain on the treatment couch. In addition to this advantage, a high radiation flux allows for increased target-to-patient distance which becomes important when a very large treatment field is needed. By moving the patient farther from the target, a larger field can be created. And, of course, a high dose rate means a higher workload is possible, or that technologists have more time for other chores.



Figure 1

The fact that the maximum dose occurs at 1.0 cm depth suggests even greater skin sparing and possibly higher doses to the tumor. The skin dose with the 4 MeV linear accelerator is approximately 30 per cent of the maximum dose.

The console has two dose indicators. One is the dose rate which, incidentally, may be adjusted from about 100 rads/minute to approximately 350 rads/minute. The stability of this instrument gives the operator some idea of how well the machine is functioning. An erratic dose rate indicates a problem and is a good indication that treatment should be terminated. A second meter gives the integral dose delivered at 1.0 cm depth. The operator, by setting the dose to be delivered, is, at the same time, selecting the termination of treatment since the unit automatically turns off when it reaches this preset dose.

Dose uniformity is achieved by the flattening of the beam with a flattening filter or, if the beam enters obliquely, wedge filters may be employed to give a more homogeneous dose.

The target, which the electrons strike, is 2 mm in diameter; whereas a radioactive source may be 2 to 3 cm in diameter. The more nearly a point source (dimensionless) is approached the greater our beam definition, or the smaller the penumbra portion of the beam. The penumbra is actually the outside border of the beam which "sees" only a portion of the target or source, and is an area of reduced dose. This is unwanted radiation since we want the tumor to be exposed to all of the primary beam.

One observation made at our institution and one which required an adjustment in treatment planning, was the occurrence of erythema with tangential ports at relatively low doses. This can be explained by the presence of low energy photons in the beam. Just as with diagnostic x-rays not all the accelerated electrons impinging on a target give rise to high energy radiation. Some of the electrons accelerated to a 4 MeV potential will result in the production of a 4 MeV photon (x-ray) but most will produce photons of lower energy.

Many of these weaker rays are removed by the insertion of a metallic filter into the beam. However, not all of them interact with the filter but may strike the patient and interact in the first few millimeters of skin. If one considers that these strike the skin obliquely, then all its energy may be deposited on the surface rather than at a depth beneath the skin. This effect was not as pronounced with Cobalt 60 radiation because only photon energies of 1.17 MeV and a 1.33 MeV were present. But, in the case of accelerator produced radiation, photon energies of from near zero to 4.0 MeV are present. The probability of interaction is much greater with low energy photons, hence, the observed reaction.

Our linear accelerator has been operating practically trouble free for the past 10 months. This is very encouraging since the first six to eight months saw approximately 12 days downtime, i.e. days when the machine was inoperable. Our patient load fluctuates between 50 to 60 patients per day presently. Long range plans call for additional staff and modern radiation producing equipment. When this goal is realized, the therapy center can provide up-to-date radiation therapy to many more patients.

SUMMARY

The linear accelerator represents the most recent advances in radiotherapy equipment. The 4 MeV unit used by UMC offers the following advantages over cobalt teletherapy units: (1) Constant radiation dose; (2) Small penumbra; (3) Higher average photon energy; (4) Higher radiation dose rate and consequently shorter treatment time; and (5) No radioactive contamination problem.

A major disadvantage of the linear accelerator is its complexity and, therefore, high maintenance requirements. However, this is more than compensated for by the advantages previously listed.

The Division of Radiotherapy is capable of administering good radiation therapy to approximately 50 to 60 patients daily with its linear accelerator, and a staff composed of three technicians, a dosimetrist, a physicist, three resident physicians and one radiotherapist. ★★★

2500 North State Street (39216)

REFERENCE

Ginzton, E., Mallory, K. and Kaplan, H.: The Stanford Medical Linear Accelerator. The Stanford Medical Bulletin, Vol. 11, No. 3, 1967.

A GOOD EXAMPLE

Dear Secretary of the Treasury: "I'm writing this penny postcard I bought for 6¢ to tell you people what a wonderful job you're doing in controlling inflation."

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Radiologic Seminar CXV: Tuberculosis of the Wrist

EDWARD L. GIEGER, JR., M.D.
Jackson, Mississippi

IN SKELETAL TUBERCULOSIS, the primary focus is usually located in the thorax; however, there may be surprisingly little or no apparent active pulmonary disease. Some reports have indicated that few patients with extensive bone lesions show active pulmonary tuberculosis. Others report that 50 per cent of patients with skeletal tuberculosis do not have concomitant pulmonary tuberculosis. Apparently, a silent bacteremia is very common in the course of primary tuberculosis and appears to account for the implantation of lesions in extrapulmonary locations, from which destructive tuberculosis can make its appearance at a later time.

The wrist is not a common location for osseous tuberculosis. One author reports a series of 517 patients with skeletal tuberculosis, of which only 12 showed involvement of the wrist. Two of these 12 were children; 8 of the 12 had skeletal lesions elsewhere, indicating that the wrist can be an isolated lesion. The carpal bones are reportedly prone to infection in the elderly and this often leads to widespread destruction with sinus formation and secondary infection. Infection of the wrist is seen more often in adults than children.

Pathologically, the primary focus of infection is usually synovial but disease may begin in the carpal bones themselves. In adults, wrist tuberculosis often begins in or involves early the bones located along the long axis of the radius. These include the distal radial epiphysis, navicular, lesser multangular, capitate, and the second and third metacarpal. Primary synovial tuberculosis spreads diffusely over the lining membrane of the joint. Granulations may extend beneath the cartilage from the bone margins to subchondral bone and through perforations in the articular cartilage. The end result is gradual erosion of cartilage and destruction of underlying bone. Within the infected area, necrotic bone is absorbed. Sequestra are infrequent, irregular and ill-defined. The course is usually slow, pus is abundant, and infection frequently extends into adjacent soft tissue and along tissue planes. The progressive bone destruction with involvement of joint space is more characteristic of osseous tuberculosis than pyogenic osteomyelitis. Untreated cases may proceed to sinus formation and extensive secondary infection.

Tuberculous lesions of bone are typically slow in evolution and progression. There may be a time lapse of 3-24 months after implantation of the tubercle bacillus before bone lesions can be visualized radiographically. If the disease begins in the joint, the earliest radiographic sign is joint effusion. In time, the effusion will extend through the capsule and along tissue and fascial planes. Marked decalcification of the bone follows, with or without synovial effusion. Erosion of bone is followed by obvious gross destruction. Typically, reactive bone sclerosis about the destructive area is minimal. Periosteal new bone formation is seen in about one-third of the cases and is usually not extensive. When present, it is less dense and less irregular than pyogenic lesions.

The radiographs presented are those of a 65-year-old lady who was reportedly in good general health. She had noted the appearance of painless nodules over the right wrist approximately one month prior to admission to the University Hos-

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University Medical Center, Jackson, Miss.



Figure 1. AP (left) and lateral views of the right wrist demonstrate extensive soft tissue swelling with a widespread destructive process involving all of the carpal bones, proximal metacarpals, and distal radius and ulna.

pital. Five days prior to admission, a biopsy was obtained of a nodule and a definitive diagnosis was not returned. Radiographs at that time demonstrated lytic lesions of the bones of the wrist and she was referred for further management.

On admission, there was a draining wound of the right wrist with extensive soft tissue swelling. Radiographs of the wrist (see Figures 1 and 2) showed a destructive process involving all of the carpal bones as well as the distal radius and ulna and proximal metacarpals. There was little reactive selerosis and no new bone formation was identified. No calcification was identified in the soft tissues. A chest radiograph demonstrated no active disease. A skin test with intermediate strength PPD was positive. Arthrotomy of the wrist was done with biopsy of the synovium and distal ulna; the pathological specimen showing extensive granulomatous inflammation. During hospitalization, information was obtained from her local hospital that tuberculosis had been identified from material obtained at the time of initial biopsy. She was placed on triple therapy and discharged. ★★★

2500 North State Street (39216)

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6. Steinbach, H. L.: Infections of Bones. Seminars in Roentgenology. 1:349-359, 1966.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1972, San Francisco. Clinical Convention, Nov. 26-29, 1972, Cincinnati. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Louisiana-Mississippi Ophthalmological and Otolaryngological Society, Annual Meeting, May 11-13, 1971, Biloxi. A. V. Hays, P.O. Box 1018, Gulfport, Miss. 39501.

STATE AND LOCAL

Mississippi Academy of General Practice, Annual Meeting, July 13-15, 1972, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Mississippi State Medical Association, 104th Annual Session, May 8-11, 1972, Biloxi. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society. First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie Street, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.



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181

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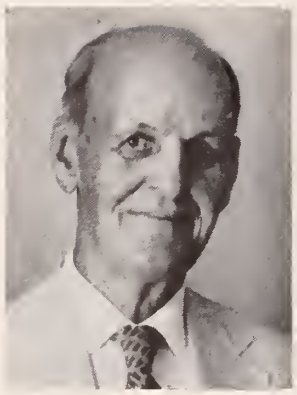
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Warnings: *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting barbiturate, than gradually withdraw. *Potentially Hazardous Tasks:* Driving a motor vehicle or operating machinery. *Additive Effects:* Possible additive effects between meprobamate, alcohol, and other CNS depressants or psychotropic drugs. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. Animal data at five times the maximum recommended human dose show reduction in litter size due to resorption. Meprobamate appears in umbilical cord blood at or near maternal plasma levels, and in breast milk at levels 2-4 times that of maternal plasma. *Children Under Six:* Drug not recommended.
Precautions: To avoid oversedation, use lowest effective dose, particularly in elderly and/or debilitated patients. Consider possibility of suicide attempts; dispense least amount of drug feasible at any one time. To avoid excess accumulation, use caution in patients with compromised liver or kidney function. Meprobamate may precipitate seizures in epileptics.
Adverse Reactions: *Central Nervous System:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations, tachycardia, various forms of arrhythmia, transient ECG changes, syncope; also, hypotensive crises (including one fatal case). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions: itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others: leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe, rare hypersensitivity: hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome; bullous dermatitis (one fatal case after meprobamate plus prednisolone). Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Hematologic:* Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.
Usual Adult Dosage: 1200 to 1600 mg daily, in three or four divided doses; doses above 2400 mg daily not recommended.
Overdosage: Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption.

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The President Speaking

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ARTHUR E. BROWN, M.D.
Columbus, Mississippi

In 1968, the AMA House of Delegates established the Physician's Recognition Award for participation in continuing education. The purpose of this award is to accord recognition to those physicians who participate regularly in continuing medical education. The AMA believes that all physicians should continue their education on a regular basis throughout their careers.

Your state medical association is endeavoring to do this. Your Council on Medical Education is a constitutional body of the House of Delegates. One of its functions is to have continual monitoring and guidance of postgraduate medical educational programs. In cooperation with the University Medical Center this is being done. On-campus postgraduate medical education programs have been in effect for several years. Recently the programs have been oriented to the family practitioner and one week courses have been offered. In 1970, 20 physicians were enrolled in subject areas of cancer, GI tract, EKG and heart disease, renal, stroke and pediatrics. In 1971, over 40 were enrolled.

In addition to this on-campus program the circuit courses have also been continued with meetings being held in various centers about the state. Instruction for these are provided by faculty members from the University Medical Center.

These facts are cited now for two reasons. One, to emphasize again that your state society through the various councils and committees is keeping abreast of medical advances. And secondly, these programs may serve to silence the critics who charge the medical profession with doing nothing to upgrade the quality of medical care. ★★★

JOURNAL OF THE
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EDITORIALS

The Ghost and Hoax of Chiropractic Licensure

I

THE GHOST of D. D. Palmer stalks the corridors and lurks in the cloakrooms of the Capitol at Jackson. The wraith was invoked with introduction of House Bill 380, a weary replay of the fallacious argument to "regulate" chiropractic so that only the "qualified" cultists are licensed to pound spines in Mississippi.

All of which bring to mind the opening paragraphs of an address by the late Dr. John G. Archer delivered before the 96th Annual Session of the association in 1964. Said the then-president:

"The medicine show of yesteryear hasn't really vanished from the American scene. It merely has a new, sophisticated form, a new shrewdness, and even new merciless disregard for the value of human life. Throughout recorded history—and probably before—the charlatan, the quack, and the nostrum peddler have ranked high on the list of those who practice the confidence game with one eye on the dollar and the other on the law. Even a few are within the law—however ill advised such law may be. But all are outside the limits of human decency.

"The quack, be he licensed to ply his nefarious trade by misdirected statute or not, preys upon human misery. His dedication is to personal gain, and he possesses the morality of a rattlesnake. His greatest friends are ignorance, fear, desperation, anxiety, and suspicion.

"He is instantly available—as close as your mailbox or the dingy, walk-up office over the corner store. He sometimes rings your doorbell, and he advertises for your attention. He comes in many shapes and sizes, calling himself by any title calculated to catch your fancy and engage your confidence. The sheriff may be just a step behind him, or he may have the badge of sanction and respectability of the state. But he's a quack, and to him, the sick person is just another prospective client, provided there's money to be made."

II

Chiropractors do not have the Mississippi Legislature fooled in the slightest. An overwhelming majority of our Representatives and Senators know them for the cultists they are. Most wouldn't be caught dead having a chiropractor punch them in the spine in their brutal ceremony of sacrilege in the name of treating the sick.

But some Legislators are weary of the year-in, year-out hassle as these cultists persist in seeking the badge of sanction and respectability to which Dr. Archer referred.

Then there is the contention, totally false, of course, that a licensure statute would "regulate" chiropractic, putting the present state of affairs right by assuring the state and all of its citizens that only the good guys are doing the spine punching. This is undiluted quintessence of hogwash, U.S.P.

No law to license chiropractors ever previously presented to the Legislature, not the one now proposed, nor any bill ever to be offered henceforth has the slightest intent to regulate chiropractic. As has been the case for a score of years, HB 380 reposes the "regulatory" function in a board of five chiropractors who will duly license all of their cohorts under a conveniently handy grandfather clause.

The "educational" qualifications are ludicrous, too, because there is not a single school or "college" of chiropractic recognized by the United States Office of Education or by any accepted accreditation source in this nation.

Without a doubt, chiropractic has got to go down as the greatest hoax of the 20th century. Pray that it may not be perpetrated upon the people of Mississippi by this or any other Legislature.

III

And all is not well on Capitol Hill at Jackson, either, because the state medical association has learned of a disturbing move behind the scenes at a *high level of government* to give aid and succor to the spine punchers. May it quickly be said that the fine and able health committees of the House and Senate are not parties to this move, and the two men of unimpeachable integrity who lead these committees will have no part of it. Of that, you may be sure.

But there is afoot a "compromise" which would give the chiropractors a 99 per cent licensure package and it's this: Give them licensure generally within the framework of HB 380, give them their "regulatory" board, place advertising restrictions upon them, but deny them the use of the title "doctor."

This is followed up with the euphemistic and unrealistic rationale that one of two things will happen: Either the chiropractors will reject the whole thing out of hand and go back into the woodwork or they'll meekly accept it, vanishing from the scene to do their "regulated" adjustments on folks who will seek their services in any event.

How can anybody regard this as anything other than out and out support of quackery?

IV

The *status quo* on chiropractic in Mississippi is frankly unsatisfactory. And it will continue thus as long as there is just one chiropractor within the geographic borders of our state.

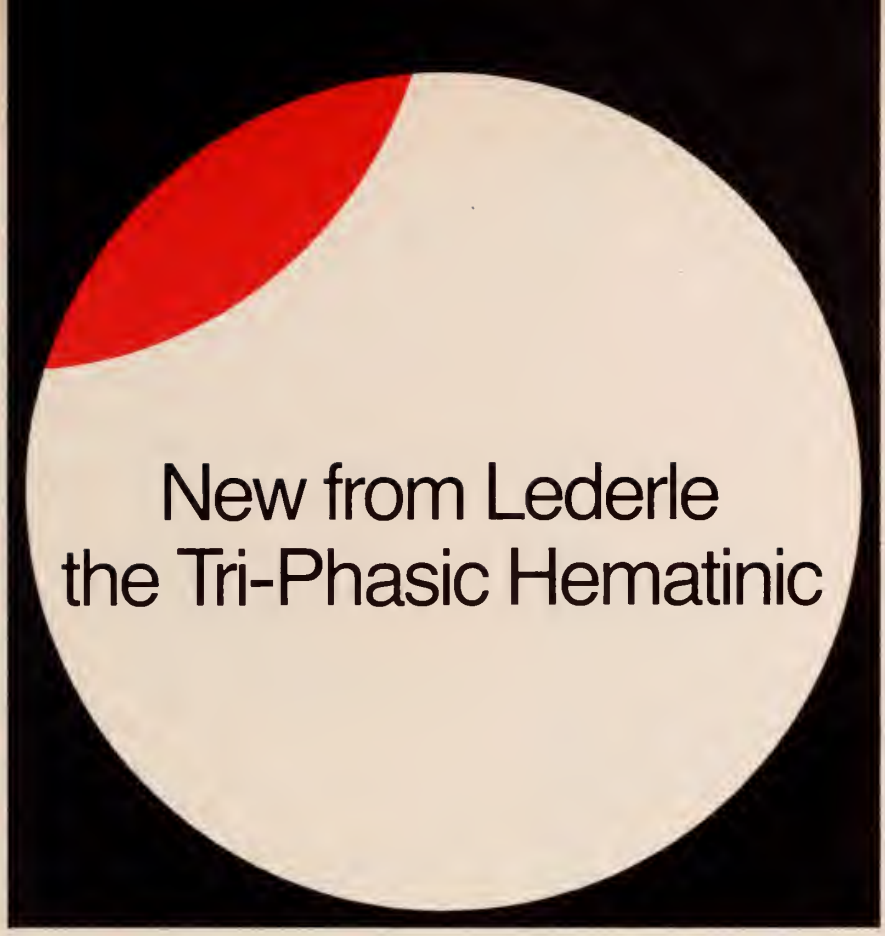
But the *status quo* is the least of the evils available, for the state confers no badge of legality upon an unscientific cult that proclaims it can cure tuberculosis, gonorrhea, meningitis, and all sorts of alleged orthopaedic and neurological disorders. Once licensed, the chiropractors would forever be immune to prosecution for violation of the medical practice act. Once licensed, it would only be a matter of time until the amendments come for inclusion under workmen's compensation, health insurance, Medicaid, and any other health service subject to state law.

Once licensed, the next logical step would be to secure the use of the title "doctor." From there on in, the story would be as it has been in every state which took the fateful and tragic step of imparting statutory respectability to a cult.

It may take many years or it may not come at all within this generation, but the day will dawn when the last chiropractor has disappeared from an enlightened United States. We shall most certainly hasten that day by maintaining the scientific integrity of health services licensed and sanctioned by the state of Mississippi.—R.B.K.



"No, no—a sample . . . a specimen . . . a wee bit . . . !"



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PHASE 3
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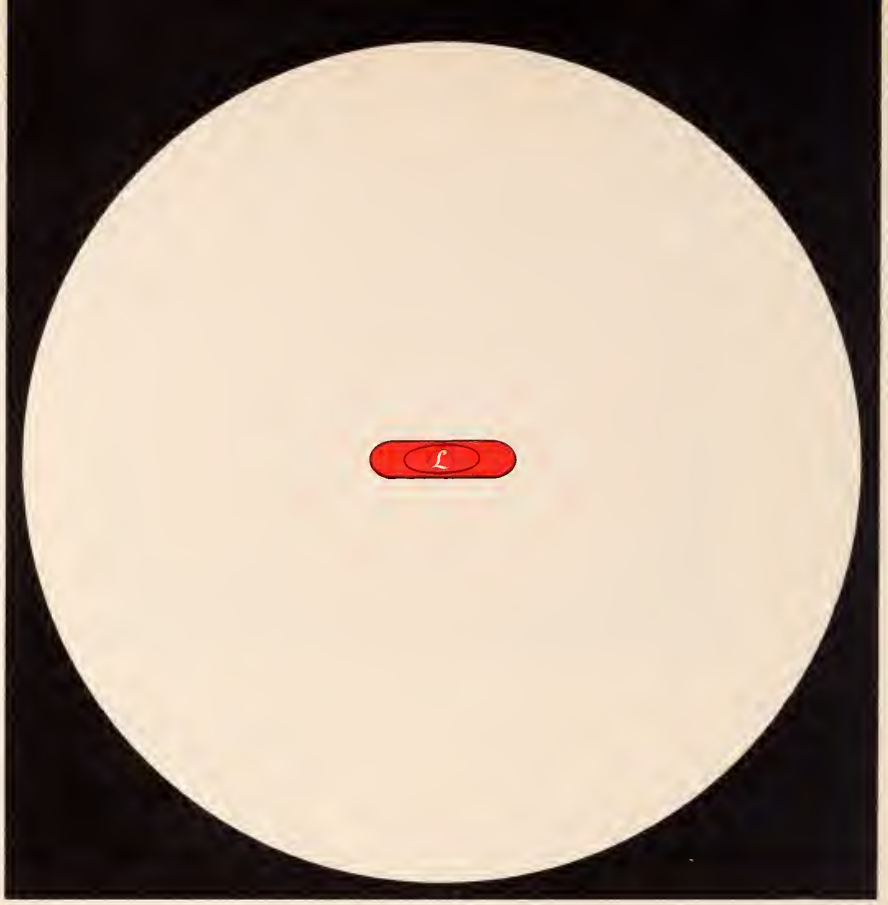
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Vitamin B_{12} (Cobalamin Concentrate, N.F.)	25 mcg.
Intrinsic Factor Concentrate	75 mg.
Folic Acid	1 mg.
Vitamin E (*d*-Alpha Tocopheryl Acid Succinate)	30 Int. Units
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Precautions: Some patients affected with pernicious anemia may not respond to orally administered Vitamin B_{12} with intrinsic factor concentrate and there is no known way to predict which patients will respond or which patients may cease to respond. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended. If any symptoms of intolerance occur, discontinue drug temporarily or permanently. Folic acid, especially in doses above 1 mg. daily, may obscure pernicious anemia, in that hematologic remission may occur while neurological manifestations remain progressive.

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421-1

Phase II and the MD: It's Discrimination!

Some can remember the OPA (Office of Price Administration) controls of the World War II era, and a good many more recall the wage and price regulations governing the market during the Korean Conflict. Now it's Phase II, and it almost takes a team of economists and attorneys to unravel the complex regulations promulgated under the Economic Stabilization Act of 1970.

Unlike the controls instituted in the early 1950s when health services were exempt, Phase II rigorously governs the economics and exchange markets of health services. So much so, in fact, that this discussion has two purposes: The first is to inform physicians of the details and requirements, even though they have previously seen part or all of them in one place or another. The second is to record once again a feeling prevalent among most physicians of the discriminatory nature of the edicts which allow the supermarket to charge what it can get for bacon while virtually pegging the price of an office visit without regard to the rent the doctor must pay (also unregulated) for his professional premises.

The regulations call a physician a "noninstitutional provider of health services." The same Washingtonese applies to independent physical therapists and similarly situated allied professionals in the care delivery field. The pharmacist, regrettably, is stripped of the last vestige of professionalism, for in the eyes of the regulations, he is just another retail merchant.

Each noninstitutional provider, the regulations say, must maintain a schedule showing base prices for principal services and each change in such price. Moreover, the provider must make the schedule available for public inspection, furnishing a copy to accredited representatives of the Internal Revenue Service or Price Commission upon request.

The regulations, which now have the effect of law, require posting of a sign of unspecified size and wording in each facility of the provider stating the availability and location of the schedule of principal prices. The provider may make no price increases before the sign is posted and the availability of the schedule is publicly announced.

Now a word about the sign, since the nonspecific character of the regulations make this a perplexing point in compliance. Obviously, a typed card two inches wide would not be deemed sufficient, whereas the 22 by 28-inch poster required for hospitals is not mandatorily prescribed for physicians. Exactly where this leaves the confused MD seems to be somewhere between extrapolationland and limbo.

The Texas Medical Association has recommended a sign eight inches wide and five inches deep with this wording:

"In compliance with Price Commission Regulations, a list of professional charges for principal services is maintained and available for inspection on request of patients."

But since preparation and posting of the sign is clearly a responsibility of the noninstitutional provider, neither the size nor wording can be nailed down. The Mississippi State Medical Association's understanding of the regulations interpret principal services as those routinely provided by the physician in the course of normal medical practice.

Next a word about the schedule, also an amorphous quantity in the otherwise precise and specific regulations. AMA spokesmen feel that copies of a recognized relative value index to which a given dollar conversion coefficient has been applied is sufficient. Most health-related agencies of the federal government have recognized the California Relative Value Studies guide and the RVIs of the national specialty societies.

Where a physician bases his regular, recurring, usual and customary charges on amounts not based upon RVIs, then a dated typed listing will probably suffice. In any event, his billings should be consistent with the index or listing.

Finally, the specific language of the regulations on physicians' professional fees is this:

". . . a noninstitutional provider of health services may charge a price in excess of the base price with respect to the furnishing of health services only to reflect allowable costs in effect on Nov. 14, 1971, and allowable cost increases incurred after Nov. 14, 1971, reduced to reflect productivity gains, and only to the extent that the increased price does not:

"(1) In the case of the noninstitutional provider that is a nonprofit organization result in an increase in its net revenues (after deducting operating expenses and depreciation) as a percentage of total revenues over that prevailing during the base period; and

"(2) In the case of any other noninstitutional provider (which MSMA interprets as meaning physicians in private practice) result in an increase in its profit margin over that which prevailed during the base period.

"In addition to the limitations set forth in the above paragraphs, the aggregate price increases of a noninstitutional provider of health services may not exceed 2.5 per cent a year."

The regulations spell out another limitation of a general nature by forbidding the noninstitutional provider from changing charging practices, reducing quality of services, or engaging in any other practice to avoid compliance with the regulations.

This confusing state of affairs is compounded by the subjectivity of medical services which cannot be priced as precisely as a pound of nails, a gallon of gasoline, or a trip to Chicago on Delta Air Lines. Besides, observes AMA, the requirement upon physicians to maintain a schedule of fees will have little effect in stabilizing prices. Patients rarely choose their physician on the basis of a fee. Physicians are chosen on the basis of ability.

Health care providers were singled out for special treatment under Phase II with the noninstitutional providers held to yearly increases of 2.5 per cent. Yet, salaries of those who work for physicians may go up 5.5 per cent, a figure calculated at a minimum for keeping good office help. And rent, supplies, and a whole host of practice necessities are open and susceptible to greater increases. Just how the doctor pays for all of this while holding increases in fees to 2.5 per cent is apparently a personal problem.

The rigid controls may be transitory, because there is a national election this year. It isn't likely that the Republicans will permit the electorate to go to the ballot box under wage and price controls as they now exist. But we can and should anticipate residual regulations which, without being price ceilings, will carry at least a connotation of restraint upon the upward spiral. In the meanwhile, it's a rank, crass discrimination against a selected group of professional individuals whose chief undoing is being competent at their work.—R.B.K.

Tragic Misadventure With Hexachlorophene

The Food and Drug Administration has been trying to wake up from what the Associated Press calls a "regulatory nightmare" on its hasty, precipitate ban on hexachlorophene bathing of the newborn. Specifically indicted in the FDA ruling was pHisoHex (Winthrop), a product about as well established in the health care field as shoes are in our clothing customs.

Save for the tragic consequences growing directly out of the restriction, the whole matter could be characterized as just another regulatory misadventure which, against the record of oral contraceptive scares, combination ingredients bans, and once, the labeling of a tennis shoe as a drug, should astonish absolutely nobody at all.

The entire point is simply this: When the preliminary and obviously inconclusive findings suggesting some degree of hazard in hexachlorophene bathing surfaced, the medical profession—or more specifically, the American Academy of Pediatrics—acted promptly, decisively, and effectively to recommend measures to protect the newborn. And what's more, physicians know that they can best rely on the advice of other physicians who weigh the risk-versus-benefit ratio as only physicians can.

The HCP ban was based upon three preliminary reports:

—Fifty newborn infants bathed with a 3 per cent HCP product in the hospital nursery were said to show blood levels of the agent of .009 to .646 mg/ml at discharge. But, incredibly, the same report stated that "no obvious toxic symptoms were noted in the newborns."

—Rats fed (yes, it said *fed*) hexachlorophene to achieve mean levels of 1.21 mg/ml showed brain changes.

—Newborn monkeys washed daily with a 3 per cent HCP product for 90 days showed mean plasma levels of 2.3 mg/ml and brain changes at autopsy. But now, it develops, the scientists con-



"I hate to come in for observation."

ducting the investigation concede that the baby monkeys were not tethered during their baths, so just how much bathwater was ingested under such circumstances cannot be known.

The JOURNAL reported in February that staph outbreaks were occurring in hospital nurseries where use of HCP had been discontinued. A few days after the JOURNAL appeared, FDA held a news conference, making the tragic succession of events public. The agency crawfished a little, too, saying that physicians didn't really understand what it had said in its Dec. 6, 1971, bulletin. The other inference was that it didn't mean what it said.

There is a lesson here, albeit at the tragic expense of regulatory conclusion-jumping and the health of newborn infants. Physicians acted promptly to advise their colleagues of the tentative findings. And other physicians listened. So the FDA's action was at worst, a monumental goof and at best, a poorly managed action of the bureaucracy.

We are not talking about "what" but "how." And we maintain that these matters are best left in the competent, experienced hands of the medical profession whose sole concern is the preservation and improvement of the quality of life.—R.B.K.

Help Is Needed on Schedule II Rx's

The pharmacist needs your help, doctor, in slicing through the red tape of the Controlled Substances Act of 1970. Nobody has been spared from dotting the i's and crossing the t's in this enactment by the Congress, and most can agree that the legislation is aimed at a worthy purpose: Getting drugs to the individual in need of them only on prescription by a physician.

The Mississippi State Pharmaceutical Association points out that one of the regulations applied to Schedule II controlled substances concerns entry of the date of the prescription and the address of the patient. It has not been uncommon for a physician to enter only the name of his patient on his Rx, since both he and the pharmacist know the patient. Usually, the pharmacist simply completes the needed information, and certainly, this has been an accepted practice in the case of non-controlled substances.

But where the prescription calls for dispensing of a Schedule II drug, the pharmacist is *forbidden* by law to enter the date and address. It's for a good reason, too, because it would be easy for someone to perpetrate a fraud in obtaining the drug—a fraud on the physician in whose name the Rx is presented and upon the pharmacist who fills it.

Jo Suber of Oxford, secretary of the Mississippi State Pharmaceutical Association, cites instances of pharmacists' receiving warnings from Bureau of Narcotics and Dangerous Drugs agents in this specific connection. She explains the dilemma faced by the R.Ph. when he receives an incomplete Schedule II script:

—Shall he fill the prescription illegally and thereby expose himself to penalty when a BNDD agent discovers this? He'd better not, to say the least.

—Shall he complete the prescription illegally and invite as much or more grief from BNDD? Very unwise if he does.

—Shall he refuse to serve the patient, stating that he cannot fill the prescription without the physician's having included the address and date? He could delay initiation of the medication, frustrate the unknowing, sick patient, or both.

—Shall he return the prescription to the physician? That simply recycles the paperwork, delays supplying the medication, and vexes everybody.

So the extra seconds needed to include the address and date are important to the physician, the pharmacist, and most of all, to the patient who is the center of the picture. Even the BNDD will be happy.—R.B.K.

A Good Sleeper for Blood Banks

In the legislative arena, be it in the Congress or state legislature, it's the sleepers that get you, usually for the worse. But a sleeper with merit is pending before the 2nd Session of the 92nd Congress which deserves attention and understanding of every member of the health care team, because if enacted, it can and will exert a profound effect on blood banking in the United States.

Rep. Victor V. Veysey (R., Calif.) has introduced H.R. 11828, the National Blood Bank Act of 1972, a sleeper, to be sure, for even the American Medical Association's legislative reports have yet to mention it. The measure is basically sound, and with some modification, it would strengthen our voluntary, nonprofit system of blood banks in the United States.

The proposal would establish an Office of National Blood Programs which could not be a part of the National Institutes of Health. NIH now licenses and controls some—but not nearly all—

blood banking activities in the United States. The major objective of the bill is laudable: It would encourage and preserve, exempt from antitrust action, voluntary, nonprofit blood banking programs.

The ONBP could designate as a national blood bank system any program which:

—Operates in 10 or more states and whose member banks drew not less than 2 million units of blood in the past year.

—Requires adherence to system by-laws or regulations by written contracts.

—Recruits voluntary donors.

—Adopts standards equal to or more stringent than Standards for Blood Banks and Transfusion Services of the American Association of Blood Banks.

—Provides for inspection, accreditation, and withdrawal of accreditation where standards are not met.

—Requires member banks to designate an individual in charge of voluntary recruitment of donors, be open for business during normal hours of convenience, cooperate with other blood banks on voluntary donations, and label blood "low risk" from voluntary donors and "high risk" when drawn from paid donors.

The nationally recognized system must also support aggressive programs of voluntary donor solicitation, provide recognition for volunteers, and establish annual goals in numbers of voluntary donors recruited. Stressing the voluntary aspect even more strongly, banks drawing a majority of its blood from volunteers would be Class A banks, whereas one securing most of its units from paid donors would be designated Class B.

The bill provides for licensure of banks whether in interstate commerce or not and for an advisory council consisting of those experienced in blood bank administration, consumers, hospital representatives, public relations specialists, and two representatives from each national system recognized under the act.

The antitrust provision would permit any national system to exclude or reject from membership any bank which was not a nonprofit organization.

The American Association of Blood Banks states that it did not sponsor or seek the legislation but in general supports it. AABB objects to the "low" and "high risk" labeling as virtually meaningless and as an exposure to liability litigation. It takes the same view of a proposed federal register of donors.

The Veysey bill deserves careful study and consideration by local, state, and national medical organizations, much closer consideration than it has received so far. And while nobody particularly craves any federal systematizing of blood banking, the Veysey proposal would preserve voluntarism and the matter of antitrust problems brought into acute focus a few years ago in the celebrated Kansas City case. Let's have careful consideration and constructive discussion on H.R. 11828.—R.B.K.

POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

March 20-24, 1972

CARDIOLOGY INTENSIVE COURSE

University Medical Center, Jackson
March 20-24, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Patrick H. Lehan, M.D., professor of medicine and Mississippi Heart Association Love Memorial Research Professor of Cardiology, The University of Mississippi School of Medicine

Emphasis in this one-week intensive course is on bedside diagnosis of heart disease. Registrants will use such diagnostic aids as pulse tracings, phonocardiograms, electrocardiograms, x-rays, and hemodynamic data. The course includes rounds, cardiac catheterizations and team discussions on patient management.

April 10-14, 1972

PEDIATRICS INTENSIVE COURSE

University Medical Center, Jackson
April 10-14, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinators:
J. M. Montalvo, M.D., associate professor of pediatrics, The University of Mississippi School of Medicine
Nell Ryan, M.D., associate professor of pediat-



the compound analgesic that calms instead of caffeinates

In addition to pain this patient has experienced anxiety fear, embarrassment, anger and frustration. It's very likely that these psychic factors actually accentuated his perception of pain. Surely the last thing he needs is an analgesic containing caffeine. A much more logical choice is Phenaphen with Codeine. It provides a quarter grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can control the pain more effectively. It's no accident that the Phenaphen formulations contain a sedative rather than a stimulant. Don't you agree, Doctor, that psychic overlay is an important factor in most of the accident cases you see?

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Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital ¼ gr., 16.2 mg. warning: may be habit forming. Aspirin 2½ gr., 162.0 mg. Phenacetin 3 gr., 194.0 mg. Hyoscyamine sulfate 0.031 mg. Codeine phosphate ¼ gr. No. 2, ½ gr. No. 3, or 1 gr. No. 4. warning: may be habit forming.

Uses: Provides relief in several grades of pain at a low codeine dosage with minimal possibility of side effect. Its use frequently makes unnecessary the use of addicting narcotics. *Contraindications:* Hypersensitivity to any of the components. *Precautions:* As with all phenacetin-containing products, excessive or prolonged use should be avoided. *Side effects:* Side effects are uncommon, although nausea, constipation and drowsiness may occur. *Dosage:* Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed. Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

(III) Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on prescription and may be refilled 5 times within 6 months, unless restricted by state law.



Snifter working again

For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

prescribing information appears on next page

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Dimetapp® Extentabs

Dimetane® (brompheniramine maleate), 12 mg., phenylephrine HCl, 15 mg., phenylpropanolamine HCl, 15 mg

Dimetapp Extentabs®

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.
CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.
WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.
PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.
HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

rics, The University of Mississippi School of Medicine

The second session of this one-week intensive course will feature emphasis on such skills as scalp vein techniques, use of the respirator, nebulizer and humidifier. Registrants will attend lectures on hematology, fluids, pediatric emergencies, cardiology, immunizations, allergies, seizures, pediatric surgery, renal problems and the care of the newborn.

Both week-long courses are offered through the Mississippi Postgraduate Institute in the Medical Sciences, a Mississippi Regional Medical Program-supported project. All eight intensive courses, each of which is offered twice a year, are open to Mississippi family physicians who are enrolled in the institute. Registration is limited to eight participants per class.

CIRCUIT COURSES

Southern Circuit

Hattiesburg—March 16—Session 3; Forrest General Hospital, 6:30 p.m.

Hattiesburg—March 23—Session 2 (rescheduled); Forrest General Hospital, 6:30 p.m.

Session 2—Emergency Room Diagnosis and Treatment of Drug Abuse, Dr. Gene Abel

Avoiding Patient Drug Abuse: What the M.D. Can Do, Dr. Steve Smith

Young People and Drugs, Extern Tom Brewer

Session 3—Presentation and Diagnosis of Hypothyroidism and Hypoparathyroidism, Dr. Herbert Langford

Carcinoma of the Thyroid, Dr. W. Coupery Shands

Southwestern Circuit

McComb—April 11—Session 3; Southwest Mississippi General Hospital, 7 p.m.

Session 3—Case Presentation

FUTURE CALENDAR

March 1, 1972

Circuit Course, Bay St. Louis

March 2

Circuit Course, Hattiesburg

March 13-17

Obstetrics Intensive Course

Stroke and Neurological Disease Intensive Course

March 16

Circuit Course, Hattiesburg

POSTGRADUATE / Continued

March 20-24
CARDIOLOGY INTENSIVE COURSE

March 23
CIRCUIT COURSE, HATTIESBURG (please note change in place and date)

April 10-14
PEDIATRICS INTENSIVE COURSE

April 11
CIRCUIT COURSE, MCCOMB

April 17-21
CARDIOLOGY INTENSIVE COURSE

April 24
RADIOLOGY INTENSIVE COURSE

April 25
CIRCUIT COURSE, COLUMBUS

May 1-5
NEPHROLOGY INTENSIVE COURSE

May 8-11
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

ACS Holds Emergency Personnel Courses

The American College of Surgeons Committee on Trauma, with financial support from Johnson and Johnson Company for development expenses, will launch a group of three to four day courses in continuing medical education on "Treatment of the Seriously Injured or Ill in the Emergency Department" for all physicians who work full-time or on-call in hospital emergency departments. Emergency department nurses also may attend.

Current plans call for 13 courses at sites across the United States, so as to make at least one course geographically accessible to any U. S. physician. For physicians in eastern Canada, a course will be provided in Montreal. Another in Portland, Ore., will be available for western Canadian physicians, and another in Detroit for those from central Canada.

Registration fees will vary between $50.00 and $75.00 to include several lunches and probably a reception for registrants and faculty.

Each course is approved for credit by the AMA toward its Physician's Recognition Award.

Formal announcements for each course containing a registration form may be requested from the: Trauma Division, American College of Surgeons, 55 East Erie Street, Chicago, Ill. 60611.

DEATHS

BIRCHETT, JOHN A. K., JR. M.D., Tulane University School of Medicine, New Orleans, La., 1920; interned Charity Hospital, Vicksburg and was resident surgeon for three years; secretary of Warren County Medical Society 1922; member of the Fifty Year Club of MSMA; died Jan. 24, 1972, age 76.

TODD, NORMAN WENDELL. M.D., Tulane University School of Medicine, New Orleans, La., 1944; interned Employees Hospital, Fairfield, Ala., one year; junior resident (internal medicine), 1944-45, same and senior resident (internal medicine), 1945-46; resident (internal medicine), Massachusetts General Hospital, Boston, Mass., 1950-51; died Jan. 26, 1972, age 53.

WILKINS, WILLIAM THOMAS. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1928; interned Baroness Erlanger Hospital, Chattanooga, Tenn., 1928-30; vice-president of MSMA, 1953-54; died Feb. 1, 1972, age 67.

Blindness Research Grants Offered

The National Society for the Prevention of Blindness will allocate a substantial portion of its research funds to provide prompt support to promising investigators who have not received extensive financial support for research in the past for conducting pilot projects with annual allocations no greater than $5,000 and not currently financed by other sources of research funds.

Acceptable projects are those which may contribute to basic understanding of eye function and disease, or that may improve diagnosis and treatment, or may be directed toward the prevention of an eye disease.

Grants are made for a one-year period. The maximum period of support for research is two years.

The National Society for the Prevention of Blindness will accept applications any time during the year and will make awards quarterly in March, June, September and December.

Application forms and further information may be obtained by writing to the Committee on Basic and Clinical Research, National Society for the Prevention of Blindness, Inc., 79 Madison Avenue, New York, N. Y. 10016.

THE CASE AGAINST CHIROPRACTIC

Every year, countless numbers of patients put false hopes into unproven and unscientific claims of "cure" by the chiropractor. Besides the loss in money, there is an even greater danger in delay of treatment.

AT YOUR OWN RISK: The Case Against Chiropractic takes you behind the scenes to chiropractic schools and clinics to examine the myth behind the theory of chiropractic. You'll find out about X-ray--the chiropractor's toy, the accreditation of chiropractic colleges, and the history of chiropractic from its beginnings in 1895 to present day practices.

Order AT YOUR OWN RISK: The Case Against Chiropractic, today--plus these pamphlets on the same subject.

WHAT THEY SAY ABOUT CHIROPRACTIC lists statements on chiropractic by such national regulatory agencies as the Dept. of Health, Education and Welfare, the U.S. District Court, and the American Cancer Society.

CHIROPRACTIC: THE UNSCIENTIFIC CULT contains information about chiropractic concepts and teachings, including material from chiropractic literature.

DID YOU KNOW THAT? explains admission requirements, accreditation, and faculty background of chiropractic schools.



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Quantity

_____ **AT YOUR OWN RISK** (paperback), OP-22, $1.00 (U.S., Poss., Canada & Mexico); $1.50 (All other countries).
_____ **WHAT THEY SAY ABOUT CHIROPRACTIC,** OP-299, 10¢ (single copy); 4¢ (50-99 copies)
_____ **CHIROPRACTIC: THE UNSCIENTIFIC CULT,** OP-69, 15¢ (single copy); 14¢ (50-99 copies)
_____ **DID YOU KNOW THAT?** OP-83, 15¢ (single copy); 14¢ (50-99 copies)

Order all from:
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(Payment must accompany all orders.)

NEW MEMBERS

McCollum, Charles Ramsey, Jr., Jackson. Born Marks, Miss., Feb. 24, 1937; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1966; interned same, one year; resident (internal medicine), 1967-69; one year fellowship in gastroenterology at V.A. and UMC, Jackson; elected Nov. 2, 1971 by Central Medical Society.

Morrison, Francis Secrest, Jackson. Born Chicago, Ill., July 29, 1931; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1959; interned at the Hospital of the University of Pennsylvania in Philadelphia, Pa., one year; resident (internal medicine), same, 1960-62; trainee in hematology at Tufts New England Medical Center, Boston, Mass., July, 1962-June 30, 1964; graduate school, Massachusetts Institute of Technology, Cambridge, Mass., 1962-63; elected Nov. 2, 1971 by Central Medical Society.

Noblin, William Earl, III, Jackson. Born Jackson, Miss., Jan. 28, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1962; interned at the Hospital of the University of Pennsylvania in Philadelphia, Pa., one year; resident (surgery), UMC, Jackson, Miss., 1965-69; resident (plastic surgery), same, 1969-71; elected Nov. 2, 1971 by Central Medical Society.

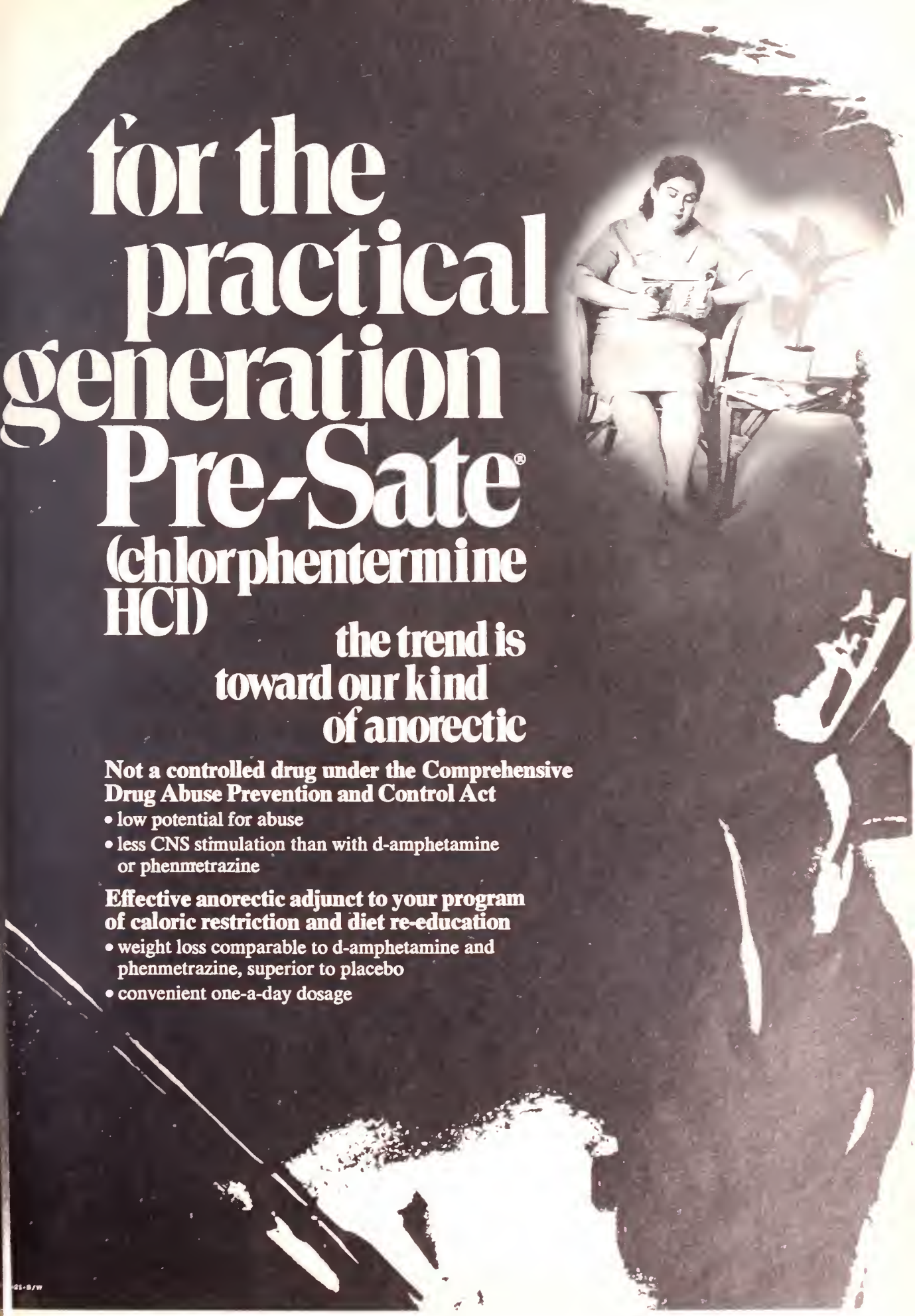
Read, Dale Gilbert, Jackson. Born Louin, Miss., Aug. 6, 1937; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1962; interned same, one year; resident (internal medicine), same, 1963-68; fellowship (endocrinology), University of Alabama, Birmingham, Ala., 1968-70; elected Nov. 2, 1971 by Central Medical Society.

Taylor, George Jessie, Whitfield. Born Jackson, Miss., June 10, 1922; M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1946; interned Naval Hospital, San Diego, Calif., one year; resident (ob-gyn), same, 1948-51; resident (ob-gyn), Naval Hospital, Bethesda, Md., April 1, 1953-Dec. 16, 1953; elected Nov. 2, 1971 by Central Medical Society.

Varner, Joseph Edwin, Jr., Hattiesburg. Born Vicksburg, Miss., Oct. 13, 1939; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1966; interned same, one year; resident (surgery), same, 1967-71; elected Dec. 9, 1971 by South Mississippi Medical Society.

Pre-Sate ®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

WARNER-CHILCOTT
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950



Pre-Sate® (chlorphentermine HCl) ... the increasingly practical appetite suppressant



What makes 'Deprol' useful for depressed geriatric patients... makes it useful for younger patients as well

- helps ease mild to moderate nonpsychotic depression *and* related anxiety
- helps assure a good night's rest



The middle-aged housewife who can't stop feeling "blue," who worries about losing her attractiveness yet neglects her appearance; reports vague aches and pains, difficulty sleeping, loss of appetite.

INDICATIONS: Useful in the management of depression, both acute (reactive) and chronic; particularly useful in the less severe depressions and where the depression is accompanied by anxiety, insomnia, agitation, or rumination; also useful for management of depression and associated anxiety accompanying or related to organic illnesses.

CONTRAINDICATIONS: Benactyzine hydrochloride: Glaucoma and previous allergic or idiosyncratic reactions to benactyzine hydrochloride or related compounds. **Meprobamate:** Acute intermittent porphyria and allergic or idiosyncratic reactions to meprobamate or related compounds such as carisoprodol, mebutamate, tybamate, carbromal.

WARNINGS: The following information on meprobamate pertains to 'Deprol' (meprobamate + benactyzine hydrochloride): **Meprobamate:** *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting barbiturate, then gradually withdraw. *Potentially Hazardous Tasks:* Drivi a motor vehicle or operating machinery. *Additive Effects:* Possible ad tive effects between meprobamate, alcohol, and other CNS depressan or psychotropic drugs. *Pregnancy and Lactation:* Safe use not establishe weigh potential benefits against potential hazards in pregnancy, nursi mothers, or women of childbearing potential. Animal data at five tim the maximum recommended human dose show reduction in litter si due to resorption. Meprobamate appears in umbilical cord blood at near maternal plasma levels, and in breast milk at levels 2-4 times th of maternal plasma. *Children Under Six:* Drug not recommended.

PRECAUTIONS: Meprobamate: To avoid oversedation, use lowest eff tive dose, particularly in elderly and/or debilitated patients. Consider p sibility of suicide attempts; dispense least amount of drug feasible at a one time. To avoid excess accumulation, use caution in patients with co promised liver or kidney function. Meprobamate may precipitate seizur in epileptics.

ADVERSE REACTIONS: Nausea, dry mouth, other g.i. symptoms; s cope; one case each of severe nervousness and loss of power of conce tration. The following side effects, which have occurred after administratic of its components alone, have either occurred or might occur when t combination is taken. **Benactyzine hydrochloride:** Benactyzine hyd chloride alone, particularly in high dosage, may produce dizziness, thoug blocking, a sense of depersonalization, aggravation of anxiety, or dist

When mild depression and associated anxiety interfere with living

DEPROL®

(meprobamate 400 mg + benactyzine hydrochloride 1 mg)



The junior executive crushed by his repeated failure to be promoted and anxious about the future; complains to you of listlessness, early-morning awakening.

The young widow whose grief has persisted too long, is pessimistic and fearful about what lies ahead, has lost interest in everything; is preoccupied with vague physical ailments, has crying spells.

nce of sleep patterns, and a subjective feeling of muscle relaxation. ere may also be anticholinergic effects such as blurred vision, dryness mouth, or failure of visual accommodation. Other reported side effects ve included gastric distress, allergic response, ataxia, and euphoria. **eprobamate:** *Central Nervous System:* Drowsiness, ataxia, dizziness, urred speech, headache, vertigo, weakness, paresthesias, impairment of sual accommodation, euphoria, overstimulation, paradoxical excite- ent, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Car- ovascular:* Palpitations, tachycardia, various forms of arrhythmia, tran- ent ECG changes, syncope; also, hypotensive crises (including one fatal se). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions: hy, urticarial, or erythematous maculopapular rash (generalized or nfined to groin). Others: leukopenia, acute nonthrombocytopenic pur- ura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopa- y, fever, fixed drug eruption with cross reaction to carisoprodol, and oss sensitivity between meprobamate/mebutamate and meprobamate/ rbromal. More severe, rare hypersensitivity: hyperpyrexia, chills, angio- urotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema ultiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson ndrome; bullous dermatitis (one fatal case after meprobamate plus ednisolone). Stop drug, treat symptomatically (e.g., possible use of inephrine, antihistamines, and in severe cases corticosteroids). *Hema- logic:* Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.

USUAL ADULT DOSAGE: One tablet three or four times daily, which may be increased gradually to six tablets daily and gradually reduced to maintenance levels upon establishment of relief. Doses above six tablets daily are not recommended.

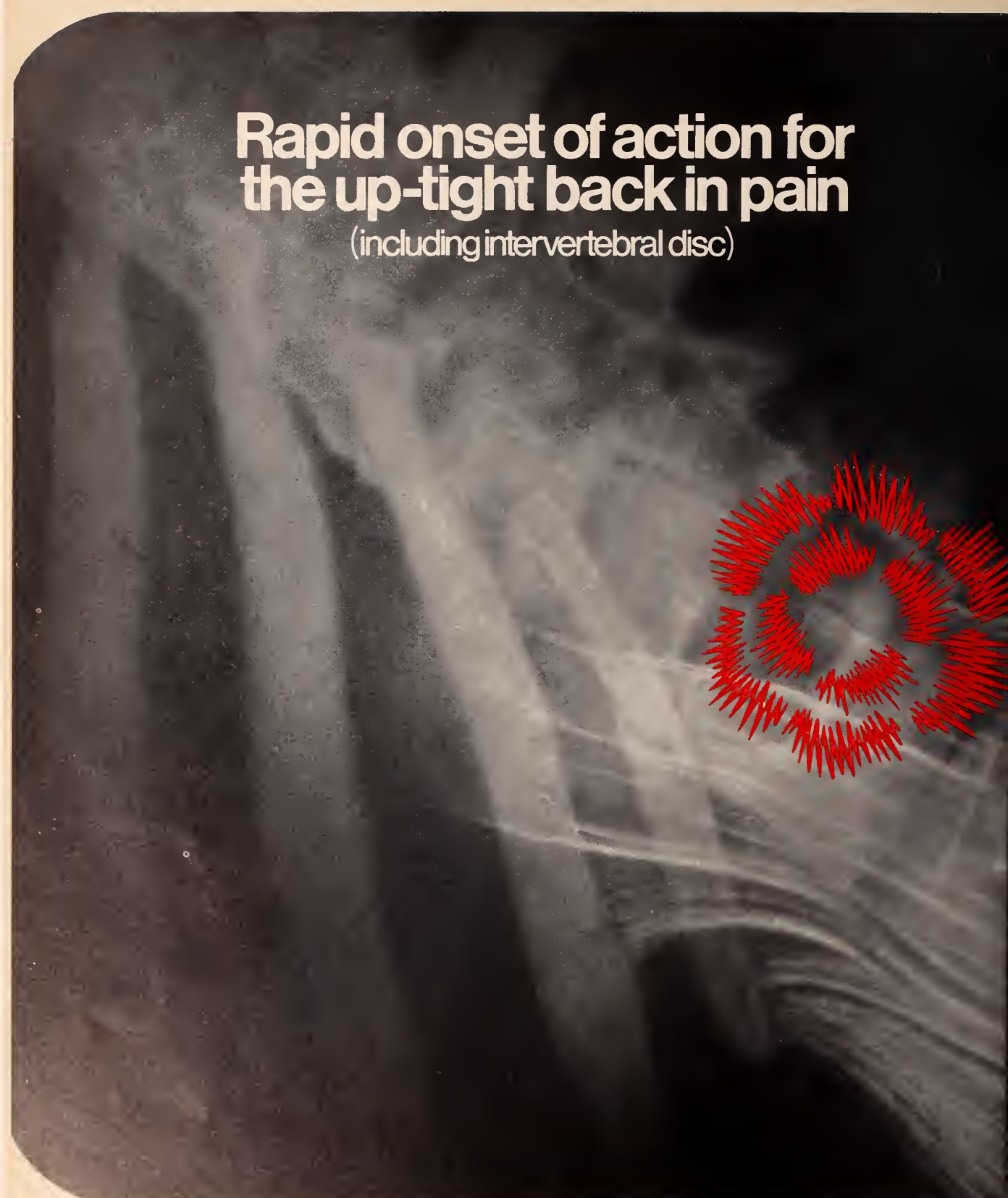
OVERDOSAGE: Overdosage of 'Deprol' (meprobamate + benactyzine hydrochloride) has not differed substantially from meprobamate overdosage: **Meprobamate:** Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption. REV 10/71

Before prescribing, consult package circular or latest PDR information.

WALLACE PHARMACEUTICALS, Cranbury, N.J. 08512

Rapid onset of action for the up-tight back in pain

(including intervertebral disc)



Indications: For symptomatic relief in conditions characterized by skeletal muscle spasm and mild to moderate pain.
Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to carisoprodol or related compounds such as meprobamate, mebutamate, tybamate.
Warnings: *Idiosyncratic Reactions:* Rarely, first dose has been followed by extreme weakness, transient quadriplegia, dizziness, ataxia, temporary vision loss, diplopia, mydriasis, dysarthria, agitation, euphoria, confusion, disorientation. Symptoms usually subside during the next several hours. Supportive and symptomatic therapy, including hospitalization, may be necessary. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. *Children Under Five:* Drug not recommended. *Potentially Hazardous Tasks:* Driving a motor vehicle or operating machinery. *Additive Effects:* Possible additive effects between carisoprodol, alcohol, and other CNS depressants or psychotropic drugs. *Drug Dependence:* Use cautiously in addiction-prone patients.
Precautions: To avoid excess accumulation, use caution in patients with compromised liver or kidney function.
Adverse Reactions: *Central Nervous System:* Drowsiness, dizziness, vertigo, ataxia, tremor, agitation, irritability, headache, depressive reactions, syncope, insomnia. *Allergic or Idiosyncratic:* Usually seen after 1-4 doses in patients not previously exposed, e.g., rash, erythema multiforme, pruritus, eosinophilia, fixed drug

Soma® 350
(carisoprodol)

Helps to...

- Relax muscle spasm
- Relieve associated mild-to-moderate pain
- Reduce stiffness

Helps give the patient...

- An opportunity to resume daily activities quickly

Simple, economical dosage schedule...

- Usual adult dosage: <u>one</u> 350 mg tablet q.i.d.

Usual Adult Dosage

Overdosage

if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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North Carolina 27709

PERSONALS

Blair Batson of Jackson has been reappointed to a three-year term on the Board of Trustees of the National Easter Seal Foundation.

Helen C. Bernfield of Jackson has been awarded the 1971 Service to Mankind Award by the Sertoma Club of Jackson. Dr. Bernfield is chief of the Pulmonary Clinic at the V.A. Center.

Julian Bramlett of Oxford has been elected as an associate member of the staff of Yalobusha General Hospital in Water Valley.

George A. Brown of Water Valley has been made permanent Chief of Staff, Emeritus, of Yalobusha General Hospital.

Joe S. Covington of Meridian has been appointed cardiopulmonary resuscitation chairman for Lauderdale County.

Robert L. Donald, Jr., of Pascagoula was re-elected to the board of directors of the Mississippi Coast Crime Commission to serve a two-year term.

John E. Evans of Vicksburg has completed a three-part series on the dangers of smoking for television station WLBT in Jackson.

Ruby B. Griffin has been appointed director of the Calhoun-Chickasaw-Webster Health Department.

Gerald Hopkins of Oxford was guest speaker at the District 9 Heart Association meeting in Biloxi. Dr. Hopkins discussed "How to Have a Heart Attack."

Wesley W. Lake, Sr., of Gulfport served as general director of the Mississippi-Louisiana Regional scientific meeting of the American College of Physicians held at Biloxi. Dr. Lake is the ACP Governor for Mississippi.

George Lamothe announces the opening of his office for the practice of ophthalmology at Suite 319, Lamar Building, in Meridian.

John B. Levens of Bay St. Louis has assumed the presidency of the Hancock County Port and Harbor Commission.

William A. Long, Jr., of Jackson was guest speaker at the Yazoo City Junior Auxiliary Drug Education Seminar.

Robert Taylor Love of Greenville has been appointed to the Washington County General Hospital Board of Trustees.

John C. Longest of Starkville and State College received a Certificate of Appointment as Medical Advisor to the Selective Service Board No. 57. Dr. Longest's duties will be "to advise the local board on special medical problems of young men from this area of Mississippi."

John F. Lucas, Jr., of Greenwood has been elected to the Leflore Bank and Trust Company Board of Directors.

Robert Odell May announces the opening of his office for the practice of ophthalmology at Suite 290, Hinds Professional Building in Jackson.

W. W. Oser of Picayune has been named an Advisory Director of First Guaranty Savings and Loan Association.

Current officers for St. Dominic-Jackson Memorial Hospital are Robert E. Tyson, retiring chief; Richard L. Blount, secretary-treasurer; H. Richard Johnson, chief-elect; and William B. Thompson, Chief of Staff for 1972.

Joe W. Walker of Water Valley has been elected Chief of Staff of Yalobusha General Hospital and will also be in charge of the Coronary Care Unit, laboratory and Medical Records. Mabry McMillan was made supervisor of the nursing and dietary departments. Dalton Spears is head of surgery, obstetrics, central supply and the emergency room.

Clyde A. Watkins of Sanatorium attended the Mississippi, Alabama and Louisiana Consecutive Case Conference on Chest Diseases in Biloxi.

Four physicians have been added to the staff of the Magnolia Hospital in Corinth. They are Carl Welch, pathologist; John P. Mitchell, Jr., radiologist in charge of diagnostic nuclear medicine; Tommy Alexander, obstetrics and gynecology; and John W. Byarlay, family practice, who will begin practice on Nov. 1, 1972.

Ray L. Wesson of Ocean Springs has been named recipient of the Distinguished Service Award by the Ocean Springs Jaycees at the annual awards banquet.

Reginald P. White of Meridian has been appointed to the American Psychiatric Association Committee on Psychiatry and the Law. Dr. White's term extends from May 5, 1972 through 1975.

HAPPINESS IS A DEAD PINWORM



Mintezol® is nonstaining

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SUSPENSION, 500 mg per 5 cc

You'll rely on MINTEZOL (Thiabendazole, MSD) often for pinworm disease. Not just because that's a very common helminthic infestation, but because MINTEZOL has such a high degree of efficacy.

MINTEZOL also provides an unusually wide range of action—against threadworm, hookworm, whipworm, and large roundworm disease. This broad spectrum of activity makes it particularly effective in these mixed worm infestations.

MINTEZOL isn't a dye. So you won't hear complaints about stained teeth, clothing, or bed linen. The most frequently occurring side effects have been anorexia, nausea, vomiting, and dizziness.



Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.
For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

Drs. Raju and Vise Added to Faculty

Dr. Seshadri Raju has been named assistant professor of surgery at the University of Mississippi School of Medicine. A native of India, he holds the M.D. degree from Christian Medical College in Vellore, India, where he interned and did a residency. Dr. Raju was also a resident at the University Medical Center in Jackson. Last year the surgeon earned the M.S. degree in anatomy at the Mississippi Institution.

Dr. Guy T. Vise, Jr., who is medical director of the Methodist Rehabilitation Center in Jackson, has also joined the faculty as assistant professor of surgery (rehabilitation) and assistant professor of orthopedic surgery. A graduate of Harvard and Tulane medical school, Dr. Vise was an intern and resident at Charity Hospital in New Orleans, La. He also served as a resident at Scottish Rite Hospital for Crippled Children in Decatur, Ga., and Rancho Los Amigos Hospital in Downey, Calif.

IRS Offers Toll Free Telephone Service

Mississippi taxpayers can get quick answers to their tax problems by calling the Internal Revenue Service from anywhere in the state without having to pay long distance charges, John W. Henderson, district director of Internal Revenue for Mississippi, has announced.

The number to call for taxpayer assistance and information in Jackson is 948-4500, in Gulfport is 896-6900, in Hattiesburg is 583-4371, and in Meridian is 693-1788. For the rest of Mississippi the number is 1-800-222-8070.

This new phone service is available on a year-round basis to help taxpayers in all their dealings with the IRS. Although help is as near as a telephone, with the new system most taxpayers should be able to prepare their own return by following the step-by-step instructions that come with their Form 1040. If taxpayers need additional help, they can call the IRS via the toll-free telephone service.

The new service will also enable many taxpayers to get answers to questions on wage and price controls without having to write or visit an IRS office.

IRS offices are open Monday through Friday from 8:00 a.m. to 4:45 p.m.

Internists Plan Scientific Session

The 53rd Annual Session of the American College of Physicians (ACP) will be held in Atlantic City, N. J., April 17-21 with scientific sessions at the Atlantic City Convention Hall.

The College, an international organization of some 18,500 specialists in internal medicine and related fields, expects several thousand physicians to attend the five days of scientific lectures, panel discussions and other events aimed at helping clinicians keep informed of new knowledge and developments in the basic and clinical sciences that affect their practices.

The theme of the 1972 session will be immunology. Special lectures, panel discussions and informal unstructured "Meet the Professor" sessions will be held throughout the week relating new findings in immunology to the causes and progress of common diseases.

Eight State of the Art Lectures on special areas of interest in immunology will be given throughout the week. These will include lectures on structures and function of immunoglobulins, the immunology of cancer, transplantation immunology, and autoimmune diseases and drugs, viruses and mechanisms.

Nearly 120 papers on original research projects will be presented in symposia devoted to major divisions of internal medicine and to such topics as office management and the delivery of health care.

For the first time, the College will televise segments of the scientific program to Atlantic City hotel rooms. Major events on the program, such as the State of the Art Lectures, will be videotaped and televised later for those registrants who are unable to attend the lectures. Some panel discussions will also be televised.

Other features of the scientific program include televised hospital clinics originating from the Johns Hopkins Hospital, Baltimore, Md., and scientific exhibits.

The College's Annual Convocation, at which new Fellows will be admitted and special awards given, will be held Monday morning, April 17.

Arrangements for the scientific program have been made under the direction of Dr. Hugh R. Butt, Rochester, Minn., ACP president and professor of medicine at the Mayo Graduate School of Medicine. Dr. Robert W. Shavelson, Atlantic City, is serving as Arrangements Chairman.


Pink isn't exactly his color,
but he loves it for a change.
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aluminum-magnesium hydroxides
mint-flavored antacid liquid and tablets
For your ulcer and ulcer-prone patients...
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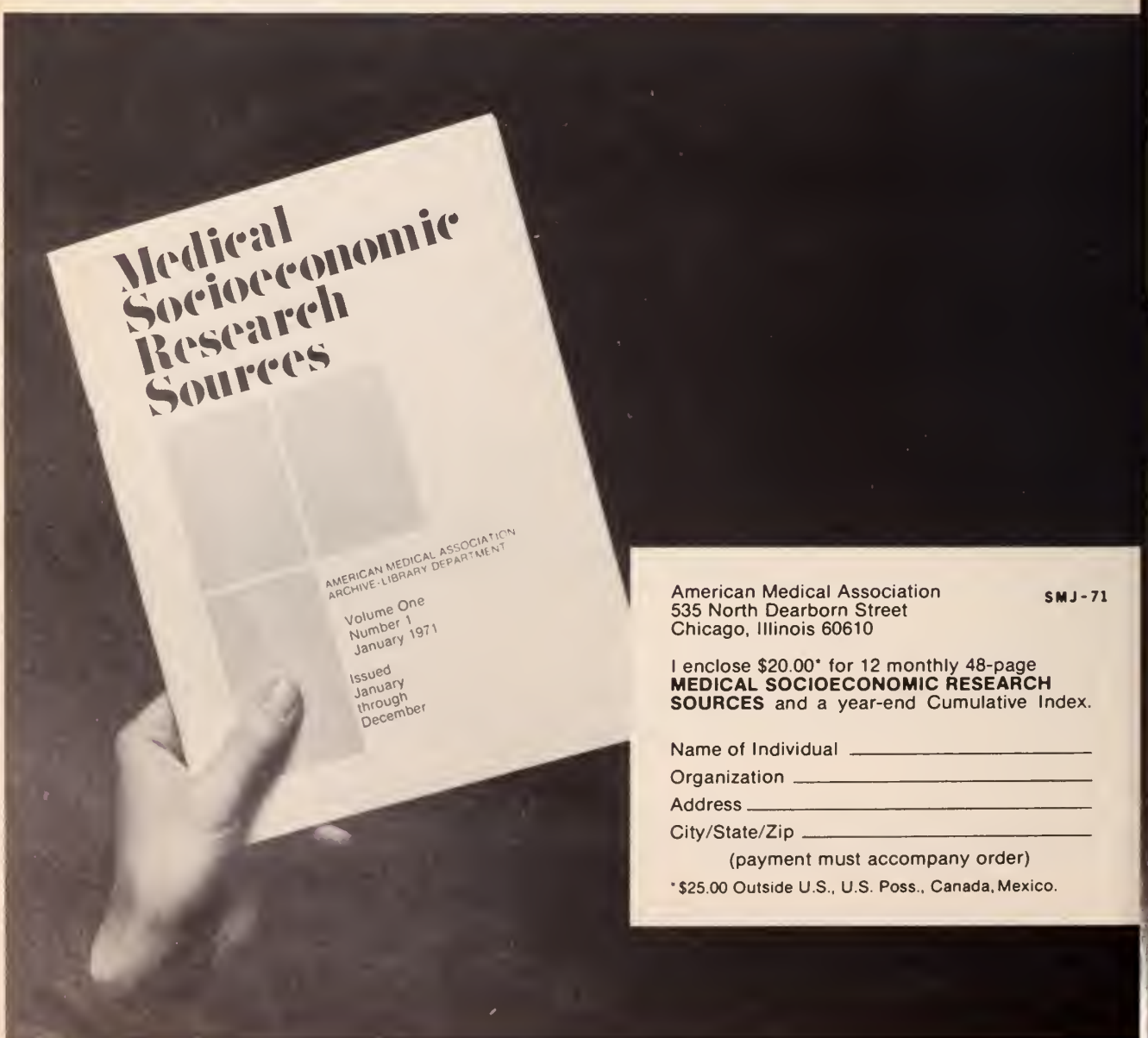
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Book Reviews

Shands' Handbook of Orthopaedic Surgery. By R. Beverly Raney, Sr., M.D., and H. Robert Brashear, Jr., M.D., with the collaboration of Alfred R. Shands, Jr., M.D. 8th Edition. 543 pages with 419 illustrations. St. Louis: The C. V. Mosby Company, 1971. $15.50.

As the name implies, this is a handbook of orthopaedic surgery. It contains a well organized and comprehensive series of concise but informative sketches of orthopaedic entities. These sketches include pertinent facts about the typical history, physical, laboratory, and x-ray findings as well as the general approach to treatment. Appropriate photographs and a current selected bibliography are also included.

It is a reliable and ready reference for the busy general practitioner, pediatrician, or internist. It is also a time tested text for medical or paramedical students serving as a ready reference or as a supplement to a lecture series. It is not written in narrative form and therefore does not lend itself to leisurely reading. Neither does it attempt to impart a philosophy of orthopaedic practice.

In relation to previous editions it retains the same popular style with some reorganization and expansion. There have been multiple minor changes to conform to current orthopaedic practice. The bibliography has also been updated.

The book remains an excellent handbook of orthopaedic surgery.

MAGRUDER S. CORBAN, M.D.

Approach to the Medical Care of the Sick Newborn. By Sophie H. Pierog, M.D., and Angelo Ferrara, M.D. 292 pages with 42 illustrations. St. Louis: The C. V. Mosby Company, 1971. $11.50.

This book is a concise, easily readable monograph on the medical care of the newborn. It is primarily a handbook approach to problems occurring in the perinatal period of life that nurses, physicians in family practice, pediatricians and house officers will find extremely useful and current in its information.

In the initial part of the book there is a summary of the problems facing the newborn patient as he makes his adaption from intrauterine to extrauterine life, with particular emphasis on the concept of the high risk neonate. A plan of how to use this concept of the high risk neonate in newborn nurseries can facilitate the medical care of the newborn.

Guidelines are given on setting up a special care unit even down to specific items of equipment with addresses of the suppliers. Where particulars are left out, these are usually noted and up-to-date references are given to guide the reader to a more inclusive coverage of a given topic.

The section on the clinical significance of abnormal signs and symptoms of disease in the newborn infant is a particularly well done and potentially helpful section for persons, both nurses and physicians, in their initiation into the manifestation of diseases in the newborn infant. The following section on specific disease entities also is well done and represents a summary of current thinking on specific entities with an up-to-date bibliography including many articles published as late as 1970.

The specific sections on drug dosage and laboratory values could be more complete. The section on technical procedures is well illustrated.

In summary, it is felt this book represents a well done up-to-date monograph on the medical care of the sick newborn.

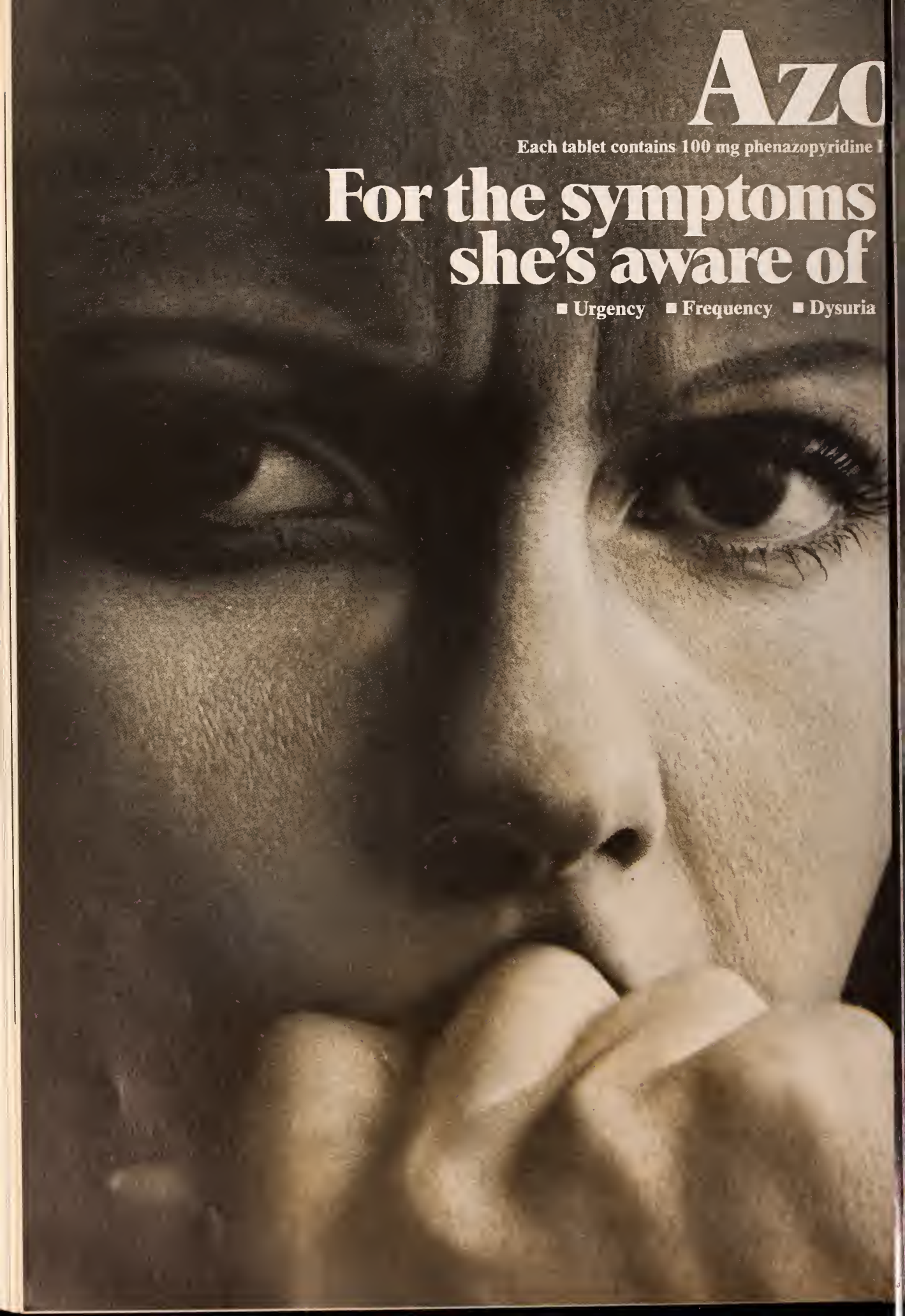
ALFRED W. BRANN, JR., M.D.

EEG Society Requests Papers

The American Electroencephalographic Society will hold its 26th Annual Meeting at the Shamrock Hilton Hotel in Houston, Tex., Oct. 12-14, 1972.

Dr. Antonio Escueta, chairman of the Program Committee, issues a call for papers to be included in the scientific program. Abstracts should be no longer than 250 words summarizing data and conclusions, typed, double-spaced and submitted in quadruplicate. All references should conform to the format used in "Electroencephalography and Clinical Neurophysiology." Supplementary material may be included, if desired.

Each abstract should include the name and address of each author and should state the audiovisual requirements for presentation. Deadline is June 5, 1972. Send all abstracts to: Dr. Antonio V. Escueta, Neurobiology Laboratories, Duke University Medical Center, Durham, N. C. 27710.


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Each tablet contains 100 mg phenazopyridine
For the symptoms she's aware of
■ Urgency ■ Frequency ■ Dysuria

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nd 0.5 Gm sulfamethoxazole.

For the infection you're aware of



ecisive dual action relieves symptoms, controls infection

Urgency, frequency, dysuria—these are the distressing mptoms of cystitis for which she wants immediate relief. But pid control of the infection is equally important to both patient nd physician. This is the situation that demands dual-action Azo antanol: the analgesic action of Azo (phenazopyridine HCl) for pid relief of pain, the antibacterial action of Gantanol® ulfamethoxazole) to control the bladder infection.

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In from 2 to 3 hours after the initial 2-Gm adult dose of zo Gantanol, therapeutic blood and urine levels begin to control sceptible *E. coli* as well as susceptible gram-negative and am-positive pathogens. Subsequent b.i.d. doses maintain anti-acterial levels throughout a 24-hour period—especially important help control bacterial build-up in urine retained during sleeping ours. The usual precautions in sulfonamide therapy, including aintenance of adequate fluid intake, should be observed. The ost common side effects are nausea, vomiting and diarrhea.

he'll feel better while she gets better

As the antibacterial action of Gantanol begins to control the fection, the analgesic action of the Azo component starts relieving e symptoms associated with her infected, inflamed and irritated ladder. In acute, nonobstructed cystitis—when rapid relief of mptoms and early control of infection are essential—prescribe zo Gantanol, the basic therapy that helps your patient feel etter while she gets better.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcu aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, an pyelonephritis of pregnancy with gastrointestina disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not bee thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dose-related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infection is 4 tablets initially, then 2 tablets morning and evening. If pain persists beyond seven days, causes other than infection should be sought. After relief has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl, bottles of 100 and 500.

UMC Seeks Dean for Allied Health

University of Mississippi Chancellor Porter L. Fortune has named an advisory committee to seek a dean for the University's new School of Allied Health at the University Medical Center in Jackson.

Dr. David B. Wilson, Medical Center assistant director for special health planning, chairs the 13-member search committee.

Members from the Medical Center include Dr. Theodore D. Lampton, Mississippi Regional Medical Program director and medicine assistant professor; D. Andrew Grimes, University Hospital director; Dr. James B. Grogan, surgery (research) associate professor, and Mrs. Florence Semeyn, dental hygiene training program acting director.

Also Miss Rebecca Yates, medical record training director, and Mrs. Frances Freeman, clinical laboratory sciences (medical technology) instructor; Ben J. Piazza, physical therapy director; Miss Edrie George, nursing professor; and Dr. Warren N. Bell, clinical laboratory sciences chairman.

Those from the Oxford campus are Dr. M. B. Huneycutt, Dean of the College of Liberal Arts; Dr. Mickey Smith, chairman of the department of pharmacy administration, and Dr. Robert Blackburn, health, physical education and recreation department chairman.

Area Internists Plan Scientific Meeting

Specialists in internal medicine and related specialties in Mississippi and Louisiana will join Mar. 17-19 for a joint scientific-educational meeting at the Broadwater Beach Hotel in Biloxi, Miss.

The Mississippi/Louisiana Regional is one of 40 scientific-educational meetings being sponsored by the American College of Physicians (ACP) during the 1971-72 academic year. Held throughout the United States and Canada, the meetings help the College's 18,500 members keep informed of new knowledge and developments in the basic and clinical sciences that affect their practices. The College has been holding these regional meetings annually since 1930.

The Mississippi/Louisiana meeting is being planned under the general direction of Dr. Wesley W. Lake, Sr., Gulfport, Miss., ACP Governor for Mississippi and assistant clinical professor of medicine at Tulane University School of Medicine. He is being assisted by Dr. A. Seldon Mann, New Orleans, ACP Governor for Louisiana and professor of clinical medicine at Tulane University School of Medicine.

Socioeconomic Congress Set

"Health Services in the '70's" will be the theme of the Sixth National Congress on the Socioeconomics of Health Care in Fort Lauderdale, Fla., April 6-8.

Sponsored by the Council on Medical Service of the American Medical Association, the three-day Congress is expected to attract 600 physicians and other authorities in the field of health care services. Daily sessions are planned from 8:30 a.m. until 1 p.m.

Among those scheduled to address the Congress are: Dr. Ira C. Layton, chairman of the board of the National Association of Blue Shield Plans; Dr. Merlin K. DuVal, Jr., assistant secretary of HEW for Health and Scientific Affairs; Dr. Ernest W. Saward, president of the Group Health Association of America; Dr. Russell B. Roth, speaker of AMA's House of Delegates; Mrs. Helen Nelson, vice-president of the Consumers' Federation of America.

The Congress theme will be developed in a series of three in-depth explorations which include the mix of health care financing, the structure of health care delivery, and the challenge to improved services.

Financing of health care will be the subject of the opening session on Thursday, April 6. Topics to be covered are paying for health care with government dollars, changing role of voluntary health insurance, and the physician and payment mechanisms.

Friday's program will cover the structure of the delivery system from the vantage of the consumer, government, poor, state medical society, aging, a community, and the press.

The concluding session on Saturday will be devoted to discussion of the challenge to improved services. This will include medical education's new look, the expanding health team, emergency medical services, and accomplishments in peer review.

"Bringing It All Together" will be the subject of the concluding address by Dr. Max H. Parrott, chairman of the AMA Board of Trustees.

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Empirin Compound with Codeine relieves aches, pains, fever and general malaise of colds and of **FLU**

A gratifying announcement about Empirin® Compound with Codeine



You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



When you select this familiar antibiotic for IV infusion you have available a broad dosage rang that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyc hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water But when 4 grams or more per day is given, Lincocin should be diluted in n less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

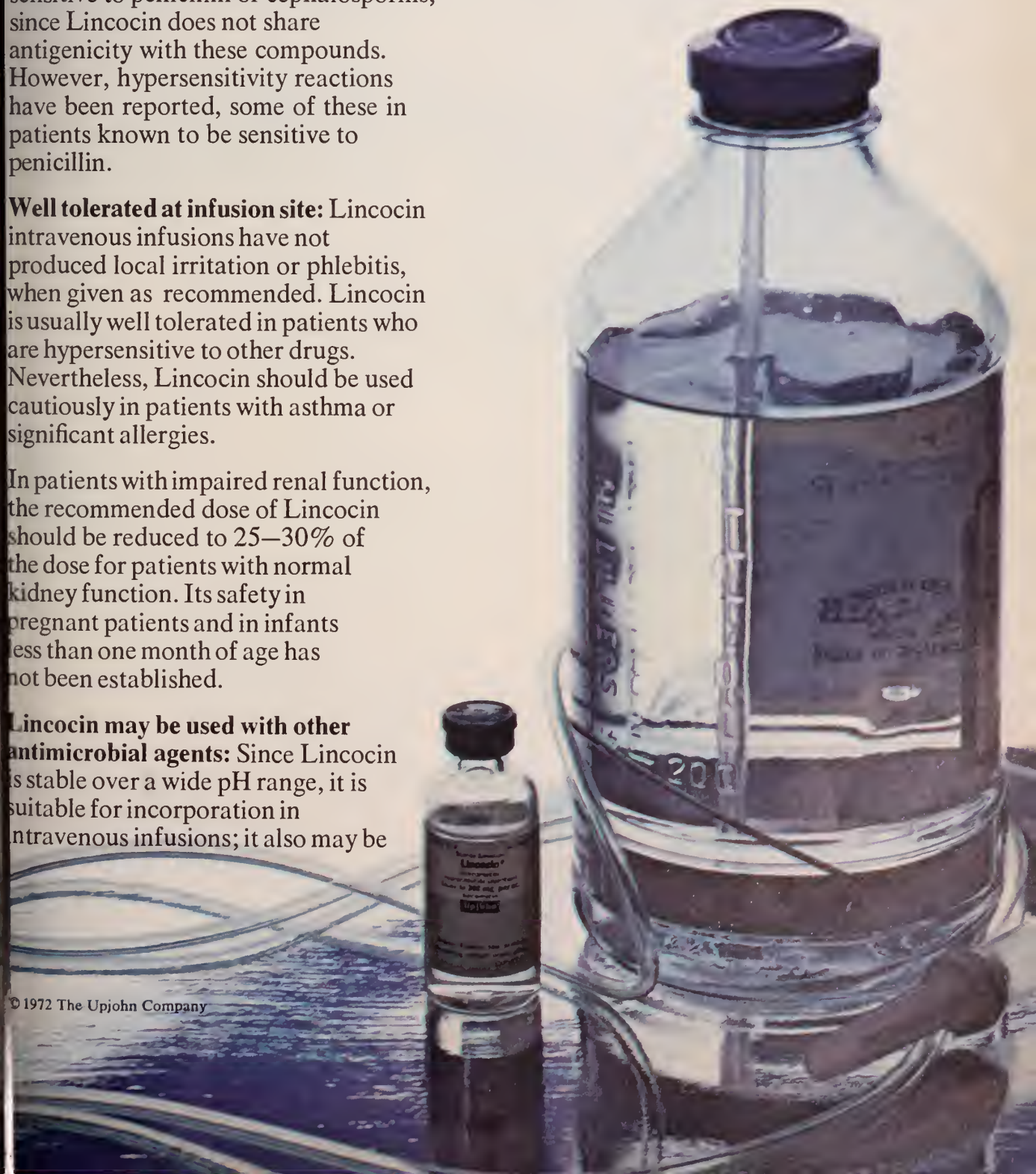
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatmen *Skin and mucous membranes*—Skin rash urticaria, vaginitis, and rare instances of e foliative and vesiculobullous dermatitis ha been reported. *Liver*—Although no direct r lationship to liver dysfunction is establishe jaundice and abnormal liver function te (particularly serum transaminase) have be observed in a few instances. *Cardiovascul* —Instances of hypotension following pare teral administration have been reporte particularly after too rapid IV administr tion. Rare instances of cardiopulmonary a rest have been reported after too rapid l administration. If 4.0 grams or more admi istered IV, dilute in 500 ml of fluid a administer no faster than 100 ml per hou *Special senses*—Tinnitus and vertigo ha been reported occasionally. *Local reactio* —Excellent local tolerance demonstrated intramuscularly administered Lincoc (lincomycin hydrochloride). Reports of pa following injection have been infreque Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distill water or normal saline has produced r local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m* Capsules—bottles of 24 and 100. *Steri Solution, 300 mg per ml*—2 and 10 ml vi and 2 ml syringe. *Syrup, 250 mg per 5 m* —60 ml and pint bottles.

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104th Annual Session Will Feature Special Inhouse Scientific Television

Scoring another first in scientific communications, the Mississippi State Medical Association will present 12 hours of lectures, papers, and top medical presentations by inhouse television at the 104th Annual Session, May 8-11, 1972, at Biloxi.

Arrangements have been concluded for use of Channel 2 and availability of the scientific TV in every room at the Sheraton-Biloxi, luxury headquarters hotel for the conclave. Sponsors of the unprecedented service are Roche Labratories.

The announcement came from Dr. Raymond S. Martin, Jr., of Jackson, chairman of the Council on Scientific Assembly who said that the service was secured through the Radio and Television Department of the American Medical Association's Communications Division. A major New York audiovisual education service will install TV equipment for the annual session.

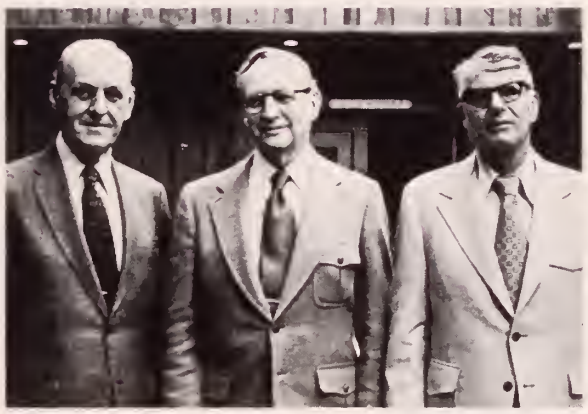
"The special scientific programs will be available on any television set in the Sheraton-Biloxi during the annual session on Channel 2," Dr. Martin explained.

"The program will not conflict with the live Scientific Assembly, since telecasting will begin about the dinner hour each day and continue into the evening. It will not interfere with regular TV programming on commercial channels."

The chairman said that tapes of major national medical meeting presentations will be offered with a wide variety of topics and areas of interests. Most shall have been taped from the recent AMA conventions, he added.

Equipment installed in the Sheraton-Biloxi will tie into the the hotel's master antenna system, piping the video signal into each room exactly as if a new Channel 2 station were on the air. The service will not be available in other hotels but will be restricted for technical reasons to the 350 rooms in the headquarters facility.

Present programming plans call for about 12 to 15 hours of nightly telecasts, and efforts are being made to assure a wide selection of presentations in all 20 specialty spheres.



Dr. J. T. Davis of Corinth, center, chairman of the Board of Trustees, discusses the plans for the innovative inhouse scientific television, scheduled for the 104th Annual Session at Biloxi May 8-11, with Dr. Arthur E. Brown of Columbus, at left, MSMA president, and Dr. C. R. Jenkins of Laurel, president-elect.

The annual session opens with the House of Delegates on May 8, and the Scientific Assembly opens on Tuesday, May 9. Special presentations on medical socioeconomics and practice problems will occupy morning segments on Tuesday and Wednesday.

The May 9 special session will cover care quality review, the association EMCRO (Experimental Medical Care Review Organization), the Mississippi Foundation for Medical Care, and peer review.

The May 10 special offering will center around professional corporations and professional liability.

General scientific sessions are slated for Tuesday and Wednesday afternoons and Thursday

morning. The combined general meetings will feature surgery, ob-gyn, medicine, preventive medicine, family practice, EENT, and pediatrics.

Twelve specialty groups will have concurrent meetings, and medical alumni from Ole Miss, Tennessee, Tulane, and Vanderbilt are scheduling social occasions. An association-wide fellowship party is on the Wednesday evening agenda.

Another first will be an evening dinner of the Flying Physicians Association with national FPA President, Dr. Francis X. Sommer of Barbourville, Ky., as the featured speaker reporting on his round-the-world flight in a single engine Beechcraft Bonanza.

The Woman's Auxiliary is finalizing plans for its concurrent annual session, and special events include the Fifty Year Club, golf tournament, and other group meetings.

Early reservations at the Sheraton-Biloxi are recommended, and convention officials are predicting a sellout by April. Additional luxury accommodations are available at the adjacent Holiday Inn and Ramada Inn, both newly constructed.

Group Practice Meeting Slated

The South Central Region of the American Association of Medical Clinics will hold its annual session Saturday, Mar. 18, at the Master Host Inn, Texarkana, Tex.

Sponsored by the Collom & Carney Clinic Association, the day's activities will include panel discussions on: 1) clinic accreditation, 2) membership, and 3) whether a clinic should have a general practice section.

The AAMC is a voluntary association of physician-guided medical centers which provide medical care in their communities by means of the private group practice of medicine.

The AAMC represents more than 270 group practice clinics throughout the United States and Canada and includes in its membership multi-specialty, single-specialty, and three-man group practices.

All interested physicians and administrators are invited to attend the group practice meeting. Information and reservations may be obtained by contacting Dr. Henry M. Carney, Collom & Carney Clinic Association, P. O. Box 1409, Texarkana, Tex. 75501.

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully correlated with bacteriologic and clinical response. When patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture medium.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarity to some goitrogens, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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acute, recurrent or chronic nonobstructed cystitis

TWO BUILT-IN BENEFITS OF GANTRISIN®

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1.

High urinary drug levels

Gantrisin quickly reaches peak antibacterial concentrations in the urine—usually in 2 to 3 hours. With the recommended dosage regimen, Gantrisin maintains these high urinary levels throughout therapy to combat such susceptible organisms as *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

2.

Generally good tolerance

Because of Gantrisin's high solubility and rapid excretion, therapy is relatively free of adverse reactions serious enough to require discontinuance of the drug (3.1% of 1002 patients in a recent study*). Even minor reactions are comparatively infrequent, but may include nausea, headache and vomiting. For other possible undesirable reactions, and precautions, please see summary of prescribing information on opposite page.

*Koch-Weser, J., *et al. Arch. Intern. Med.* 128:399, 1971.

For nonobstructed cystitis

begin with

Gantrisin®

sulfisoxazole/Roche®



Usual adult dosage:
4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*

1972 Arts Festival Set for April

"Dynamic," or just plain "dynamite" describes the activity planned for the ninth annual Mississippi Arts Festival, which will open April 25 and continue through April 30 in Jackson this year. Spectacular entertainment provided each night by celebrities in the Coliseum has now become a tradition long anticipated by Festival goers, but this year visitors can actually take part in the goings on and watch a variety of artists in the process of creating their specialties.

"Artisans in Action," as one new exhibit is called, will feature talented artisans from Mississippi and surrounding areas, displaying articles of beauty and usefulness and demonstrating the various techniques used in creating them. Unusual and really imaginative crafts are expected in this category, and exhibitors will be working there and informally discussing their projects throughout the week.

A particularly exciting innovation for this Arts Festival is the Film Competition and Celebration in which all ages—with separate divisions for amateurs and professionals—will demonstrate their original work with movie cameras. Students from grade school through college will compete with others their age for cash awards and professionals will compete for special recognition.

Providing a showcase for creative and imaginative motion pictures and encouraging young filmmakers to experiment with their ideas, the Arts Festival Committee hopes, likewise, to further people's interest in film teaching and study and develop audiences who appreciate film as an art.

"Circus Studio"—designed especially for the thousands of youngsters who enjoy the Arts Festival each spring—promises to provide a wonderful world of creative activity for boys and girls. The goal of the youth pavilion workers is "to create an atmosphere in which children can have an enriched experience in working with art and crafts materials," and to do that, a five-ring area of art participation limited solely to children's activities will beckon to young Festival visitors.

Activities planned include painting with tempera paint, picture making with oil pastels, cutting and pasting activities, elementary crafts, and modeling with clay. And in addition to that, sideshows of unusual interest for children from 4-12 years old will provide even more variety. These will include children's plays, films, concerts, puppet shows and story-time hours. Some 10,000 young people are expected to hear the Jackson Symphony Orchestra in four concerts planned especially for them during Festival week.

Artists of every age and talent—from preschoolers to pros—will be exhibited on the Festival grounds. Mississippi's finest native artists will display their for-sale works in the "Little Gallery," an exclusive spot planned along the midway, and the popular clothes-line showing sponsored by the Mississippi art enthusiasts will again be seen. Completing the exhibition line-up will be a showing by area high school artists, a "paint-in" by junior high school students, and a display of art by winners in the state-wide children's competition, sponsored each year by Junior Auxiliaries throughout Mississippi.

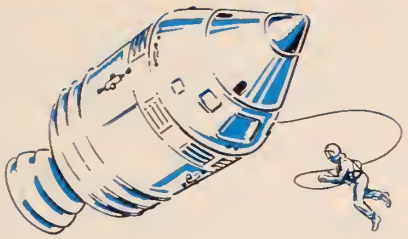
In the now well-known annual Literary Competition, an innovation is 1972's addition of the "Mississippi Short Story" category, which joins the traditional divisions of short story, formal essay, informal essay, poetry, and drama. Mississippi short story entries may be factual or fictional, but all deal in some way with the state (history, traditions, locale, local color, etc.), and they —like the other entries are judged by outstanding professional writers. An Intermediate division for college students only (leaving the Senior division for adults and the Junior category for high school students) is still another first for '72.

And the Coffeehouse, always a focal point at the Festival, will again feature top-notch musical entertainment with individuals and groups from throughout Mississippi appearing. Performers are carefully selected on the basis of talent, creativity, and entertainment value and this year those who wish to audition have the added incentive of a professional taping session to be awarded the best musician or group by Malaco, Inc., of Jackson.

A variety of food will be provided by two specialty restaurants, and Festival patrons may dine either inside the area where the "Little Gallery" is located, or outside on benches lining an attractively decorated mall. After the dinner hour each evening, headliners for America's only state-wide arts festival will perform in the 10,000-seat Coliseum and in Jackson's new city auditorium. This year's luminaries will be announced shortly.

Along with these internationally-known guest artists, outstanding musicians, vocalists, writers and actors from throughout the South will exhibit their skills in Pavilion attractions along the midway with plays, concerts and Coffeehouse entertainment planned nightly.

All-inclusive ticket packets—priced at $5, $10,



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and $15—will go on sale by mail Mar. 13, 1972. Information may be obtained by writing MAF Tickets, P. O. Box 4354, Jackson, Miss. 39216. Each packet includes two evenings of major entertainment in the Coliseum and one evening in the Auditorium, plus the exciting array of attractions along the Festival midway.

Again this year, the Festival grounds will be opened to non-ticket holders, with minimal charges set for certain midway attractions.

The 1972 Festival is being presented by the Mississippi Arts Festival, Inc., with Mrs. Robert G. Nichols, Jr., serving as chairman of the production committee. Assisting are Mrs. John H. White, Jr., co-chairman; Mrs. Lee S. Duddleston, treasurer; Mrs. Leland R. Speed, secretary; Mrs. E. Grady Jolly, Jr., promotion chairman; and Mrs. John T. Kitchings, program advisor.

Medical Assistants Announce 1972 Exams

A record number of applicants are expected to sit for the 1972 Certification examination, according to Miss Jo Estrada, RN, CMA, of San Antonio, Texas, chairman of the Certifying Board of the American Association of Medical Assistants (AAMA).

Medical assistants may seek any of three types of certification: Administrative, Clinical, or Dual (combination of administrative and clinical).

"The popularity of the test is due to a number of factors," Miss Estrada said. "We're proud of the fact that more and more physicians are recognizing the value of employing a certified medical assistant. As a result, they are encouraging their assistants to attend night classes offered at community and junior colleges or to join study groups scheduled by many local chapters of AAMA."

"Acceptance of the certification program nationally can also be attributed partly to recent improvements in examination content and the handling of test scores," Miss Estrada continued. "Significant changes have been achieved in the program, and still others are in process for the coming year."

Candidates in 1971 were given a complete evaluation of their scores via computer printout. Successful candidates have expressed gratification in knowing their standing. Similarly, those who did not quite measure up to standards have appreciated knowing their areas of weakness in order to focus future study on those sections.

One of the most important changes for 1972 is the construction of the test. Questions will be geared more toward the practical application of knowledge rather than textbook learning. Major revisions in the 1972 examination have also made it possible to shorten the testing time to one day —the fourth Friday in June.

Of special interest to educational institutions offering a medical assisting program is the broadening of eligibility standards. In 1971 students in their second year of an AMA-AAMA accredited program were allowed to sit for the examination. Effective in 1972, students enrolled in a one-year program approved by AMA and AAMA may also apply by Feb. 1 and take the test in June. Successful candidates will then receive their certificates after proof of one year of experience in the field. All students will be required to take the Dual examination.

Requirements for medical assisting instructors have also been expanded to include not only those in accredited junior or community colleges but also those who are teaching AMA-AAMA approved programs in vocational-technical, proprietary or military-based institutions.

Certification packets containing updated materials and complete information are available from the American Association of Medical Assistants, One East Wacker Drive, Suite 1510, Chicago, Ill. 60601.

SAMA Announces 22nd Annual Meeting

The Student American Medical Association (SAMA) will hold the 22nd Annual Meeting of its House of Delegates at the Biltmore Hotel in Los Angeles, April 28-May 1, 1972. The meeting to elect national officers and Board of Trustees will include exhibits of a health oriented nature.

To accomplish good communications, SAMA has designed a wide-open free flowing area called DIALOG CENTER 72. This is the focal point for convention activities—registration, communications, elections, and information. The Center will be a natural gathering place for students to listen and talk with educational, commercial, industrial and governmental exhibitors.

Program highlights include educational and project workshops on current issues such as national health insurance, doctor draft, drug abuse, population, and medical education.

Central Opposes Marijuana Legalization

The Central Medical Society has taken an official stand as "strongly opposed to any move to legalize the sale and use of marijuana in Mississippi."

Practicing physicians in Hinds and the six surrounding counties took the action at their January meeting. The motion passed without a single dissenting vote.

The society made its strong stand "in response to recent publicity" to legalize marijuana in this state, according to wording of the motion.

The physicians "asserted their opinion as to its (marijuana's) inherent and potential dangers."

Emory Has Enterostomal Therapy

The Emory University School of Medicine will be the first school in the South to offer a training program for enterostomal therapists.

Supported by a new grant of $15,200 from the American Cancer Society, the Emory program will train health professionals in the care and rehabilitation of patients with intestinal stomas—surgical openings in the intestinal tract which are necessary for elimination.

The common term for a person with an intestinal opening in the abdominal wall is "ostomate." Most ostomates have had part or all of their large intestines removed because of cancer, a pre-cancerous condition, or colitis.

Currently, there are only four programs for enterostomal therapists in the country: in Cleveland, Ohio; Grand Rapids, Mich.; Harrisburg, Pa., and Baltimore, Md.

The Emory program will involve special physical and emotional counseling for both hospital inpatients and outpatients from the Southeast. Plans call for training two qualified individuals in each six weeks period.

"This will enable us to have approximately six to eight programs a year and to train approximately 16 individuals annually," said Dr. William C. McGarity, associate professor of surgery at Emory and director of the enterostomal training program.

Those initially taught will be nurses, medical students, interns, residents, and physicians also will benefit from the program, Dr. McGarity said.

"I've felt there has been a need for this type of program for many years," Dr. McGarity explained. "We've conducted an outpatient clinic for ostomy patients for the past three years, and Mrs. Jane Walker, who is the state's only full-time practicing enterostomal therapist, has done outstanding work in this clinic."

Mrs. Walker, herself an ostomate, started the Georgia Ostomy Association with Mrs. Trudy Stern in 1956. Mrs. Walker became an enterostomal therapist and began counseling patients upon referral by their physicians.

"I found that many patients were depressed because they had nowhere to turn, no one to answer their questions," Mrs. Walker explained. "I also found that many physicians and nurses didn't fully understand the personal problems faced by an ostomate."

Dr. McGarity said the goal of enterostomal therapy is the rehabilitation of ostomy patients so that they can lead a normal life. There have been recent improvements in the surgical construction of stomas (openings) such as colostomies, and ileostomies, the Emory surgeon said. And newer types of equipment for the management of these intestinal openings have been developed.

"With the new techniques and equipment, and with proper education of the ostomate, these individuals can lead a normal life," Dr. McGarity said.

Geriatrics Holds Meeting

The American Geriatrics Society (AGS) will hold its 29th Annual Meeting April 5-6 at the Americana Hotel in New York City.

The two days of scientific sessions will include special award lectures on major issues in geriatric medicine, reports on clinical research in the field and panel discussions on topics of general interest to clinicians caring for geriatric patients.

The AGS is a national medical society whose 8,000 members are medical specialists or allied health personnel interested in geriatric medicine. Dr. Irving J. Wright, New York, president of the American Geriatrics Society, said the meeting is also open to other physicians and surgeons, interns, residents, nurses, occupational therapists and other paramedical personnel and to members of organizations with a special interest in geriatrics. There is no registration fee.

Endometrial Cancer Detection Improved

A new diagnostic technique which will make early detection of cancer of the lining of the womb a practical procedure for doctors to perform in their own offices has become available to physicians generally.

Called the Gravlee Jet Washer by its inventor, Dr. L. Clark Gravlee, Jr., assistant professor of obstetrics and gynecology at University Hospital and Hillman Clinic, Birmingham, Ala., the device is being marketed by The Upjohn Company, Kalamazoo.

"It is our belief that this device can be as effective in helping to reduce deaths from endometrial cancer (cancer of the lining of the uterus, or womb) as the Papanicolaou Test ('Pap' smear) has been in cervical cancer, where mortality rates have been cut 50 per cent in a generation," an Upjohn spokesman said.

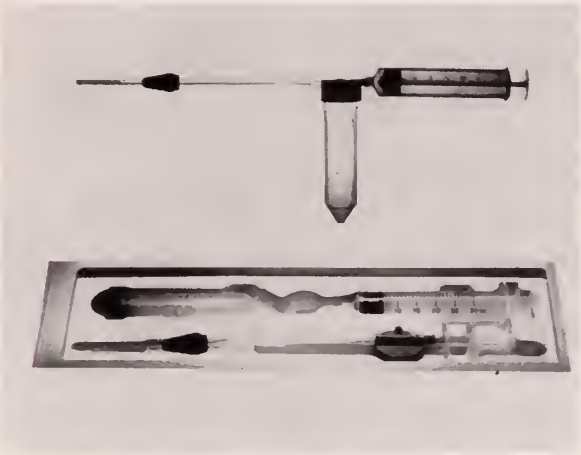
Uterine cancer, including cancer of the cervix and cancer of the endometrium, is the second most frequent form of cancer among women, ranking just behind breast cancer. Of 45 million women over 35 alive in the United States in 1970, it is estimated that 1,840,000 will develop uterine cancer and that, of these, about 765,000 will have endometrial cancer.

Up to now, the only reliable method for detecting endometrial cancer has been a surgical technique, dilation and curettage (D and C), which requires hospitalization and must be performed under anesthesia. Thus, the D and C is generally used only when suspicious symptoms are already present and the optimum time for diagnosis and treatment has passed.

Dr. Gravlee was motivated to develop a simpler method for obtaining cell and tissue specimens from the endometrium when, as a resident at the University of Alabama College of Medicine Hospital he realized that approximately 70 per cent of the cancers of the upper womb are missed because of a lack of means for detecting them.

The device he developed is the only intrauterine washing device featuring the principle of "negative pressure." The procedure can be performed in the physician's office without analgesia or anesthetic; no complications have been observed from use of the Washer, although mild menstrual-like cramps have occurred in some patients.

A syringe attached to one end of a double-tubed cannula is used to draw—not force—a sterile saline solution into the uterus, where it bathes the entire endometrium and is withdrawn into a specimen container in a single operation. The cells and tissue can then be submitted to a laboratory for microscopic examination, as is done with Pap test smears. In most cases, enough material for laboratory study can be withdrawn by the Gravlee Jet Washer in three to five minutes.



The Gravlee Jet Washer, now being marketed by The Upjohn Company, Kalamazoo, Mich., is a new device to aid in the detection of endometrial cancer by withdrawing cells and tissue from the uterus for laboratory examination as a basis for diagnosis.

Neither the Gravlee nor the Pap test are, within themselves, positive means for detecting cancer. Their role is to provide the cells and tissue needed for laboratory tests by expert pathologists from which a diagnosis can be made. If suspected cancer cells are found, the physician can then perform other tests for confirmation and institute appropriate treatment.

In clinical trials on more than 1,000 women conducted by Dr. Gravlee, the test provided cytological material from which womb cancer has been detected with diagnostic accuracy comparable to that achieved by D and C.

Use of the Washer is contraindicated in women who are pregnant, who have recently aborted or who have acute pelvic inflammatory diseases.

The Gravlee Jet Washer has been under development and clinical testing by Becton, Dickinson and Company, Rutherford, N. J., for the past five years. They will continue to manufacture and package the product. The Upjohn Company has acquired marketing rights in the United States and will be responsible for distribution.

Quality of Life Congress Planned

The American Medical Association Board of Trustees is sponsoring, in cooperation with 20 governmental and volunteer agencies, a National Congress on the Quality of Life Mar. 22-25, at the Palmer House Hotel in Chicago.

The Congress will concentrate on maternal and child health from conception through adolescence —within a social, environmental and educational frame of reference.

The program features formal presentations by experts in the medical, social and behavioral sciences, education, law, religion and governmental affairs. Complementing their presentations will be workshops and youth, consumer and professional reactor panels.

For more information write Dr. Effie O. Ellis, AMA, 535 N. Dearborn St., Chicago, Ill. 60610.

Mass. Executive Visits Association's EMCRO



Mr. Paul Rogers of Lemoyne, Penn., Director of Systems Design and Research for the Pennsylvania Medical Society, recently consulted with Mrs. Ann Butler, at left, and Mrs. Susan Sheldon of the association's EMCRO department. Mr. Rogers reviewed the Mississippi EMCRO computer setup and discussed plans for the National EMCRO workshop which was held in Jackson Feb. 21-22.

SMA Ophthalmologists Plan Section Meeting

The Section on Ophthalmology of the Southern Medical Association will hold its 1972 meeting in New Orleans, Nov. 13-16.

Papers are now being accepted for presentation at this meeting. For further information, contact Dr. Hilliard M. Haik, Section Secretary, 812 Maison Blanche Building, New Orleans, La. 70112.

Blue Shield Institutes "Reciprocity" Program

On Mar. 1, 1972, a new Blue Shield program known as "Reciprocity" will be implemented. This means that some of the claims that physicians have necessarily sent to Blue Shield plans in other states may now be sent to the Mississippi Blue Shield Plan and payment will be made to the physician by the Mississippi Plan.

All "reciprocity-eligible" Blue Shield subscribers will carry identification cards bearing a red, double-pointed arrow in the upper left corner. After rendering services, merely fill out your Mississippi Blue Shield claim form in the usual manner *with one exception*—in the red, double pointed arrow on the subscriber's I.D. card, there will be a letter and number. This letter and number should precede the subscriber's contract number in the usual place on the claim form. Mail the claim form to the Mississippi Blue Shield Plan. You will be paid your usual, customary, and reasonable fee directly through your local Mississippi Plan.

If the subscriber does not have the red, double-pointed arrow on his I.D. card, then the claim should be sent to the subscriber's home Plan for payment as you are presently doing. Only those subscribers that have 100 per cent UCR benefits are "reciprocity-eligible."

It is expected that this program will simplify the billing process for services rendered to these out-of-state Blue Shield subscribers and expedite the payment of claims to the physician.

Watch for the red, double-pointed arrow on the subscriber's I.D. card and contact your local Blue Shield Plan's Professional Relations Department if you have any questions.

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur with relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular *effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets. One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.). TEPANIL. One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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Prescribing Information — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rosh, or visual disturbonces occur. **Dosage:** One tablet upon retiring. Where necessory, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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CHAMPUS Explains Separation Eligibility

The Denver-based headquarters of the Civilian Health and Medical Program of the Uniformed Services has received a number of inquiries concerning the eligibility for CHAMPUS benefits of dependents of active duty military personnel following the sponsor's separation from the military service under announced early-out programs.

CHAMPUS officials are reminding beneficiaries that except when the active duty sponsor retires or dies, a family's eligibility for CHAMPUS ceases as of midnight the day the sponsor is separated from active duty.

If a dependent is hospitalized at the time of the sponsor's separation, CHAMPUS can share the cost of care only through midnight of the day of separation. Similarly, CHAMPUS cannot, under current provisions of the law, pay for maternity care beyond the day of separation.

AHA Encourages Fat-Modified Diets

Fat-modified diets for all hospital patients will now be encouraged in the selective cycle menus published in *Hospitals, Journal of the American Hospital Association.*

The change in the hospital journal's policy is based in part on a report of the Inter-Society Commission for Heart Disease Resources (ICHD) which made three recommendations aimed at preventing heart disease: changes in the American diet, elimination of cigarette smoking, and pharmacological control of elevated blood pressure. The dietary changes include adjustment of caloric intake, reduction of dietary cholesterol, and substantial reduction of saturated fat.

The selective cycle menus have been a regular feature of *Hospitals, J.A.H.A.,* since 1957.

Recognizing that there is a difference of opinion concerning the importance of diet in connection with heart disease, the ICHD suggests that at times public health decisions must be made on the basis of incomplete evidence, and recommends that these "reasonable and safe changes" be implemented promptly.

The ICHD represents 29 leading medical, nursing and allied health organizations, including the AHA, and includes more than 100 physicians, experts in the area of cardiovascular disease.

The ICHD report calls on all sectors of the public health and medical community to develop a comprehensive and sustained public and professional nutrition education program around these recommendations.

Pediatrics Session Set for San Diego

Current concepts in pediatric cardiology, what the pediatrician should know about systemic hypertension in childhood, problems of the adolescent, pediatric emergencies, and respiratory distress syndrome are among the subjects to be presented during the annual spring session of American Academy of Pediatrics, April 24-27 in San Diego, Calif. Presentations on immunologic deficiency disease, current concepts in infectious diseases and genetics will round out the meeting to be held at the Town and Country Hotel and Convention Center.

General program papers will be presented during morning half-day sessions. Round table discussions on a wide range of current pediatric subjects will supplement the morning half-day sessions on Monday, April 24 and Tuesday, April 25.

Scheduled to be held in the afternoon from 1 p.m. to 3 p.m., round table presentations will include: vaccines—new and old, basic principles of EKG interpretation for the pediatrician, tuberculosis—diagnosis and management, allergy, intestinal infections, and pediatric endocrinology. Other topics in the round table program will include: some modern concepts of infant care, coccidioidomycosis, accident prevention, renal disease, and management of urinary tract infections in childhood.

A luncheon program presented by the AAP Council on Pediatric Practice will feature a discussion on the pediatric nurse associate and her impact on the private pediatric practitioner.

A special luncheon on Wednesday, April 26, will feature Dr. David Allan, Children's Health Center, San Diego, Calif. Dr. Allan will speak on the delivery of health care in England.

The Academy, with headquarters in Evanston, Ill., is the Pan-American association of physicians certified in the care of infants, children and adolescents. The AAP has approximately 13,000 members in the U. S., Canada, and Latin America.

Achrocidin® Stay Denied

Lederle's motion for a stay of the Food and Drug Administration order decertifying Achrocidin®, a tetracycline-antihistamine-analgesic compound, was denied Dec. 22 by the U. S. Supreme Court.

A Company spokesman stated that Lederle is taking the necessary steps to comply with the Food and Drug Administration order.

This action by the Food and Drug Administration removing Achrocidin® from the market has been taken despite the fact that it has been in satisfactory medical use over a 15 year period. During this time, the spokesman pointed out, physicians have written some 55 million prescriptions for the compound and the Food and Drug Administration has itself certified both the safety and effectiveness of 897 successive Achrocidin® production batches.

Lederle Laboratories is a division of American Cyanamid Company.

Hospital Staff Journal Published

A new monthly journal aimed at developing better communications between hospitals and physicians began publication in January. *The Hospital Medical Staff* is published by the American Hospital Association.

"*The Hospital Medical Staff* will deal with problems common to all medical staffs in their relationship to the organizational structure of hospitals and their management," said Dr. Thomas H. Ainsworth, Jr., editor of the new publication.

The publication will serve as a medium for the exchange of ideas between hospitals and physicians, with heavy emphasis on the role of the physician in the decision-making process. It is the first periodical devoted exclusivcly to thc physician's concern in the area of organization and management of health care delivery services, according to Dr. Ainsworth.

The Hospital Medical Staff is designcd cspecially for the busy physician. It is small enough to bc carried in a coat pockct, and layout and type have been chosen for maximum readability.

Copies are being sent to the nearly 7,000 AHA member hospitals. In addition, hospitals may purchasc individual subscriptions for chiefs of staffs and members of medical staff committees.

Industrial Health Conference Planned

The 1972 American Industrial Health Conference will be held April 17-20 in the Philadelphia Civic Center, with headquarters at the Bellevue-Stratford Hotel, and sponsored by the Industrial Medical Association and the American Association of Industrial Nurses.

This medical-nursing conference will bring together approximately 2,500 industrial physicians, industrial nurses, safety engineers, industrial hygienists, public health officials, academicians and management representatives.

The scientific program, in which many of the nation's experts in the field of occupational health will participate, will be augmented by both scientific and technical exhibits. Postgraduate seminars and workshops in selected areas of industrial medical practice also will be presented.

Registration is open to anyone having an interest in the health of the working population. Registration fee is $10.00. The advance program and registration forms are available from the American Industrial Health Conference, 150 North Wacker Drive, Chicago, Ill. 60606.

CHAMPUS Rules on Nonavailability

Due to a recent Department of Defense ruling, many dependents of active duty members of the uniformed services no longer have to obtain a Nonavailability Statement (DD Form 1251) when seeking hospital care under CHAMPUS.

Under guidelines recently announced by officials of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), dependents residing with their active duty sponsors who live in Iowa, Minnesota, Oregon, Vermont, West Virginia and Wisconsin no longer need a Nonavailability Statement to obtain inpatient care through CHAMPUS.

In addition, dependents in other areas who reside morc than 30 miles from a uniformed service hospital may now also obtain care in civilian hospitals without a Nonavailability Statement.

In the past, except in unusual circumstances, as in thc case of an emergency, dependents of active duty personnel residing with their sponsors had to obtain a Nonavailability Statement before they werc authorized to receive inpatient care under CHAMPUS.

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Index to Advertisers

American Medical Association 12, 108A
Arch Laboratories 10

Blue Shield 8
Burroughs Wellcome Co. 104F, 112A

Campbell Soup Company 92A

Geigy Pharmaceuticals 84A

Hill Crest Hospital 4

Kay Surgical, Inc. 19

Lederle Laboratories 96A, 96B, 96C, 96D
Eli Lilly and Company front cover, 18

Merck, Sharp and Dohme 106, 107
Merrell-National Laboratories 120A, 120B
Mississippi Medical Political Action Committee 19

William P. Poythress and Co. 116A, 116B

A. H. Robins Company 100A, 100B, 101
Roche Laboratories second cover 3, 6, 7, 10B, 11, 110, 111, 114, 115, fourth cover
J. B. Roerig and Company 10A, 16, 17

G. D. Searle Company 92B, 92C
Smith, Kline and French Laboratories 84B

The Upjohn Company 14, 15, 112B, 112C, 112D

Wallace Pharmaceuticals 92D, 93, 104B, 104C, 104D, 104E
Warner-Chilcott Laboratories 104, 104A
Winthrop Laboratories 108A
Woodward Academy 10

Thomas Yates and Company third cover

IN CONCLUSION

Ratification of treaty to control psychotropic substances has been urged by Bureau of Narcotics and Dangerous Drugs in testimony before Senate Committee on Foreign Relations. Treaty must be ratified by 40 nations to become effective. AMA gave cautious and conditional approval, asking changes to assure freedom of research and protection of medical records confidentiality. AMA also said that treaty relegates medical and scientific role to advisory statu

FDA has taken on herculean task of evaluating every over-the-counte drug and preparation now on market. Expert review panels will need three years to complete job aimed at assuring OTC products are safe effective, and accurately labeled. AMA has often focused attention on value of self-prescribed, home remedy preparations for minor ill and economy in health care. Better health education of public now indicates more intelligent use of OTC preparations.

Death rates of American males have changed little in 20 years, but women are living longer. New studies by Metropolitan Life actuarie show that ratio of male to female deaths increased to 175 per cent in 1970 from 148 per cent in 1950. Rise in male death ratio is attributed to environmental exposure hazards and life styles while women are endowed with advantages in resisting most common diseases Male death ratio is lower for nonwhites than for whites.

First step in decreasing malpractice suits seems to have been taken by N.J. State Supreme Court. Tribunal has made contingent fee system much less attractive for zealous plaintiffs' attorneys by limiting fees to 50 per cent of first $1,000 recovered with maximum fee 10 per cent on jury awards of $100,000 and over. Canada has outlaw contingent fees for lawyers and now has only 3 per cent as many malpractice suits as U.S.

Patient's co-pay share in Medicare continues to increase with new requirement of $68 hospital deductible plus $17 per day for 61st through 90th days and $34 per day on lifetime reserve. ECF co-pay is $8.50 for 21st to 100th day. Part B premiums go to $5.80 per month next July, up almost 100 per cent in six years. Increase would have been to $6 per month, but Phase II guides were imposed by government on itself.

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

MAY 3 1973
OF MEDICINE

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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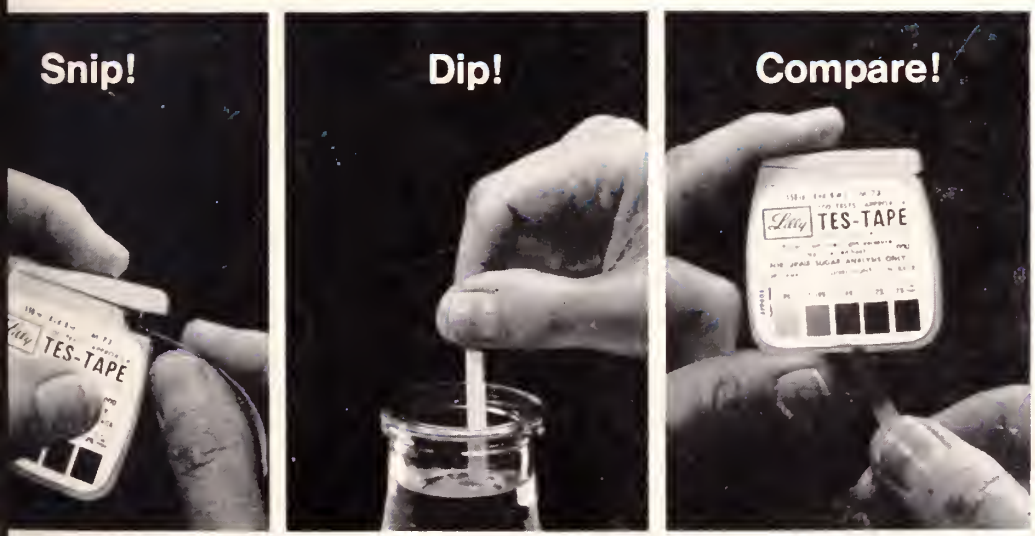
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This Month . . . Tuberculin Test, Vein Thrombosis, MSMA 104th Annual Session, House of Delegates Handbook



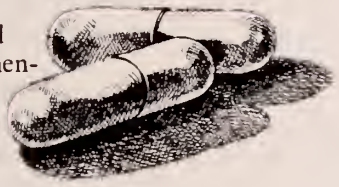
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ngs: Caution patients about possible combined effects cohol and other CNS depressants. As with all CNSdrugs, caution patients against hazardous occupations ng complete mental alertness (*e.g.*, operating machinery,). Though physical and psychological dependence have been reported on recommended doses, use caution in istering Librium (chlordiazepoxide hydrochloride) to addiction-prone individuals or those who might increase ; withdrawal symptoms (including convulsions), following tinuation of the drug and similar to those seen with barbes, have been reported. Use of any drug in pregnancy, n, or in women of childbearing age requires that its ial benefits be weighed against its possible hazards. As l anticholinergic drugs, an inhibiting effect on lactation cur.

tions: In elderly and debilitated, limit dosage to smallest e amount to preclude development of ataxia, oversedaconfusion (not more than two capsules per day initially; e gradually as needed and tolerated). Though generally ommended, if combination therapy with other psychoseems indicated, carefully consider individual pharmaeffects, particularly in use of potentiating drugs such as inhibitors and phenothiazines. Observe usual precautions ence of impaired renal or hepatic function. Paradoxical ns (*e.g.*, excitement, stimulation and acute rage) have eported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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NHLI Undertakes Clinical Trial

The National Heart and Lung Institute will soon undertake a large-scale clinical trial to determine to what extent illness and death from coronary heart disease can be reduced through measures to modify or eliminate three common risk factors, Dr. Theodore Cooper, NHLI Director, has announced.

The NHLI Clinical Applications Program is currently inviting contract proposals for the development and conduct of a Multiple Risk Factor Controlled Clinical Trial to determine whether a preventive program directed at the reduction of elevated serum lipids, blood pressure, and cigarette smoking among high-risk males aged 40-59 can achieve a significant reduction in the incidence of heart attacks and death from coronary heart disease over a six-year period of medical management.

According to present estimates, approximately 80 per cent of death and disability from cardiovascular diseases occurs among persons having one or more of these risk factors working against them. Two or more risk factors are commonly present in the same individual, and persons with all three risk factors are at especially high risk from arteriosclerosis and its complications, such as acute heart attacks.

For example, data gathered from the NHLI-sponsored Framingham Heart Disease Study show that men with one risk factor had a clinical incidence of coronary heart disease of 1.9 times the rate of men with none of these risk factors. With two risk factors present, the incidence was 3.4 times higher, and with all three factors the incidence was 10.6 times that found among men with none.

Contracts in support of the clinical trial will be awarded on the basis of national competition to medical investigators judged best qualified to establish necessary cooperative arrangements; to undertake the screening, evaluation, and enrollment of participants; and to maintain medical-management regimens for the six-year follow-up period.

Adequate clinical facilities must be available at each potential participating center to recruit at least 600 men at high risk because of high blood lipids, elevated blood pressure, or cigarette smoking, and to manage at least 300 high risk men in the study group. Each study participant must be seen at least 4-6 times per year (more initially) and each member of the control group once per year.

Contract recipients will use a common protocol with standardization of measurements and clinical procedures. These will be developed by the principal investigators of each clinic in conjunction with the NHLI program office staff and with a steering committee and policy board for this collaborative project.

Men recruited by each center will receive medical and laboratory evaluation at the start of the program and periodically over a planned six years of follow-up. A special program relating to diet, blood pressure reduction, and reduction or discontinuation of cigarette smoking will be undertaken for one half of the participants while the remainder would be referred back to their personal physicians or usual medical care centers.

A mailing of invitations to potentially interested investigators has been made, said Dr. Cooper.

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CONTENTS

ORIGINAL PAPER

The Tuberculin Test as a Routine Office Procedure **123** LEE R. REID, M.D.

SPECIAL ARTICLE

Radiologic Seminar CXVI: Pelvic Vein and Inferior Vena Caval Thrombosis: A Case Report **128** WILLIAM F. LYNCH, JR., M.D.

ANNUAL SESSION

Complete Program **131** Four Days in May

Handbook of the House of Delegates **157** Advance Reports

EDITORIALS

The European Brain Drain and the Quest for Excellence **161** Exodus to America

Obstetrics a la Bankers' Hours **163** When Are They Born?

The Ethics of Credit Card Financing **163** Ethical, But Tricky

THIS MONTH

The President Speaking **160** 'A Word of Warning'

Medical Organization **173** Specialty Societies, Concurrent Meetings Highlight 104th Annual Session

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Pinworm therapy is often a family affair



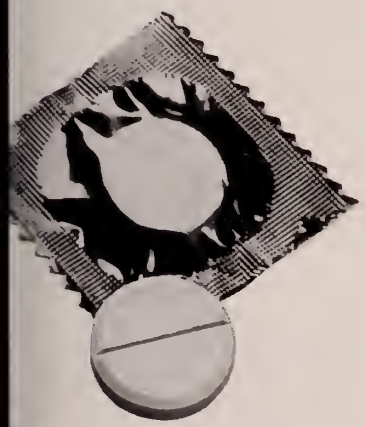


Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorex nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddine and headache have occurred. Rarely, tinnitus, hyperirritabili numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise i cephalin flocculation and SGOT; perianal rash, cholestasis a parenchymal liver damage; hyperglycemia; transient leukope malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

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more detailed information, consult your MSD representa- or see the Direction Circular. Merck Sharp & Dohme, ision of Merck & Co., Inc., West Point, Pa. 19486

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addendum

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Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



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Complete literature available on request from Professional Services Dept. PML.

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NEWSLETTER

April 1972

ear Doctor:

ewest round of transplantation is replacement of diseased parts of he ear to restore hearing. A current issue of Transactions, offi- ial journal of American Academy of Ophthalmology and Otolaryngology, eports successful transplants and tells of ear tissue bank in opera- ion since 1967 in San Jose, Cal., as part of the Institute for Medi- al Research of Santa Clara County.

> Recommending tissue be removed from subject not deceased for more than 24 hours and under refrigeration for most of that time, the center supplies for transplants: ear drum; ear drum with malleus; ear drum with three ossicles; ear canal, ear drum, ossicles; incus only; and stapes only.

ary Poppins' simple therapy - a spoonful of sugar - has gained medi- al recognition as treatment for persistent cases of hiccups. Nine- een of 20 cases responded to the treatment, reported Drs. Engleman nd Lankton in New England Journal of Medicine. Prescription: one easpoonful white, granulated sugar, dry, by mouth.

orldwide ethical pharmaceutical sales of U.S. prescription drug anufacturers increased 10 per cent in 1970 over 1969, and it is xpected that in 1971 research and development expenditures will ise 10 per cent, says the Annual Survey Report of member companies ompiled by the PMA Research and Planning Department.

nvironmental Protection Agency has awarded a $100,000 contract to niversity of Colorado pediatricians to study effects of living in omes where uranium ore tailings were used for fill in Mesa County, ol. Project will study newborn children and also possible effects f low-energy radiation exposure on families living in the homes.

ep. Wilbur D. Mills (D., Ark.), chairman of House Ways and Means ommittee, introduced a bill providing a 20 per cent boost in Social ecurity benefits on June 1. Tax rate changes proposed by Mills to inance the higher benefits would raise the maximum SSA tax deduc- ion from $468 in 1972 to $624 next year, a jump of $156.

Sincerely,

Rowland B. Kennedy
Executive Secretary

Physicians' Consultants Will Be Certified

Doctors' business consultants will soon be able to show proof of their competence through a program of certification launched by their national society.

The Society of Professional Business Consultants (SPBC) recently announced the completion of the first round of examinations for certification of consultants who specialize in advising physicians and dentists on business matters. The first Certified Professional Business Consultants (C.P.B.C.s) will be named shortly.

"Certification has been the society's major goal for a number of years, and most of our members have participated in the development stages—as test item-writers, as certification committee members, as examinees in the pilot phase, or as examiners," said SPBC president Don C. Smith, who is with Gaarder & Miller, Inc., Appleton, Wis. "Naturally, we hope to see the C.P.B.C. become as important in our profession as the C.P.A. is to the accountant."

The Society of Professional Business Consultants is a national organization of consultants providing business advisory services exclusively to physicians and dentists. SPBC member firms provide consulting services to professionals in 50 states and some areas of Canada. Services of the professional business consultant range from single survey-consultation to a continuing service encompassing all economic aspects of a doctor's practice.

The society's certification program has been in development for over five years. After members drafted an original examination, it was pilot tested. The society then sought the professional advice of the Testing Division of Harcourt Brace Jovanovich, a leading educational testing organization. The examination has been thoroughly revised under HBJ supervision and was given in research form one additional time.

The first round of examinations were conducted at four sites across the country in November, 1971. A total of 50 consultants, with experience in professional business consulting totaling 720 years (an average of 14-plus years), took the test. The examination will again be offered in June, 1972.

For further information of the society and its members, write Society of Professional Business Consultants, 221 North LaSalle Street, Chicago, Ill. 60601.

Pre-Sate®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccesstul in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

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(chlorphentermine HCl)

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Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
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Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
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Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant



When you select this familiar antibiotic for IV infusion you have available a broad dosage rang that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyc hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in n less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

nfections caused by susceptible strains f pneumococci, streptococci, and taphylococci, including penicillin-esistant strains. Staphylococcal strains esistant to Lincocin (lincomycin ydrochloride, Upjohn) have been ecovered. Before initiating therapy, ulture and susceptibility studies should e performed. Lincocin has proved aluable in treating patients hyper-ensitive to penicillin or cephalosporins, ince Lincocin does not share ntigenicity with these compounds. Iowever, hypersensitivity reactions ave been reported, some of these in atients known to be sensitive to enicillin.

Vell tolerated at infusion site: Lincocin ntravenous infusions have not roduced local irritation or phlebitis, hen given as recommended. Lincocin usually well tolerated in patients who re hypersensitive to other drugs. levertheless, Lincocin should be used autiously in patients with asthma or gnificant allergies.

n patients with impaired renal function, ne recommended dose of Lincocin hould be reduced to 25–30% of ne dose for patients with normal idney function. Its safety in regnant patients and in infants ss than one month of age has ot been established.

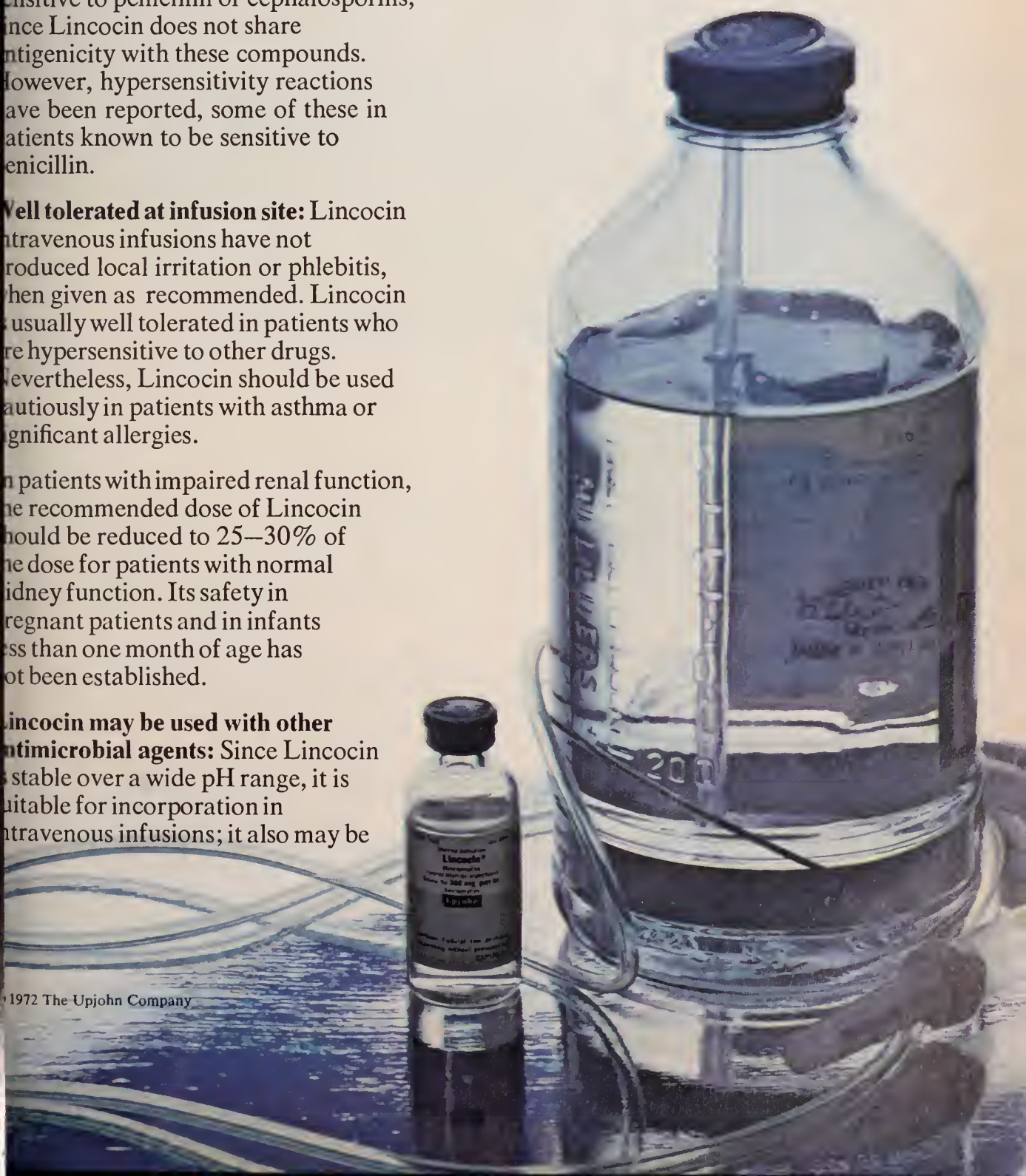
incocin may be used with other ntimicrobial agents: Since Lincocin stable over a wide pH range, it is uitable for incorporation in ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



1972 The Upjohn Company



Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatme
Skin and mucous membranes—Skin ras urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis h been reported. *Liver*—Although no direct lationship to liver dysfunction is establish jaundice and abnormal liver function t (particularly serum transaminase) have b observed in a few instances. *Cardiovascu* —Instances of hypotension following par teral administration have been report particularly after too rapid IV administ tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more adm istered IV, dilute in 500 ml of fluid a administer no faster than 100 ml per ho *Special senses*—Tinnitus and vertigo h been reported occasionally. *Local reacti* —Excellent local tolerance demonstrated intramuscularly administered Lincoc (lincomycin hydrochloride). Reports of p following injection have been infreque Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distil water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m* Capsules—bottles of 24 and 100. *Ster Solution, 300 mg per ml*—2 and 10 ml vi and 2 ml syringe. *Syrup, 250 mg per 5* —60 ml and pint bottles.

For additional product information, consu the package insert or see your Upjoh representative.

MED B-6-S (KZL-7) JA71-16.

The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn

UAB Gets Hartford Grant

A $154,871 grant for research on computer monitoring of women in labor has been awarded to the University of Alabama in Birmingham (UAB) by the John A. Hartford Foundation, Inc., of New York City.

The award was announced by foundation president Harry B. George and UAB president Dr. Joseph F. Volker. Dr. Charles Flowers, chairman of the UAB School of Medicine's department of obstetrics and gynecology, directs the project. The research is being conducted at University Hospital in the UAB Medical Center.

Motivation for the research arose because the progress of hospital labor room patients is usually followed only intermittently by hospital personnel. These intermittent observations provide acceptable, if marginal, obstetric care in normal labor, but they become unacceptable in high risk pregnancies. During these conditions, rapid deterioration of the fetus can occur before a diagnosis is made, reports Dr. Flowers.

Dr. Flowers and his associates note that normally a physician is not in the delivery area during the majority of labor, and nurses and other health personnel cannot observe the patient at all times.

"Since alterations in the status of the fetus can occur rapidly, constant observations must be made," the men report. The logical solution to the potentially dangerous situation was the development of a computer that will monitor automatically and constantly such things as uterine activity and fetal heart rate.

"The computer will sound an alarm if any abnormalities develop. Following the occurrence of an actual or potential fetal problem, the computer will print the diagnosis so that the labor room personnel may inform the physician and take appropriate actions," the scientists said.

Dr. Flowers' associates on the project are Dr. Clark Hinkley, UAB associate professor of obstetrics and gynecology, and John Hatcher, president of Automated Medical Data, Inc., Houston, Tex.

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Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 47 years of service.

Both male and female patients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialities.



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Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals and is also approved for Medicare patients.

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are apt to encounter aural
difficulties after engaging in various
natatory pursuits."

Furacin® Otic

(nitrofurazone) antibacterial/anesthetic/antifungal

Formula: Contains (w/w) 0.2% FURACIN, brand of nitrofurazone, 0.375% Micafur®, brand of nifuraxime, and 2% diperadon hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.

Indications: For treatment of bacterial otitis externa, bacterial otitis media and otamycosis. In otitis media, this preparation is not effective if the tympanic membrane is intact.

FURACIN (nitrofurazone) and Micafur (nifuraxime) are active against a variety of gram-positive and gram-negative organisms. Activity versus Pseudomonas sp. is limited to certain strains. Micafur (nifuraxime) is active against Candida (Monilia) albicans.

Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary.

Supplied: Bottle of 15 cc. with dropper.

® Originators and Developers of The Nitrofurans
EATON LABORATORIES
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DATELINE

nfo Program Begun or Small Hospitals

Philadephia, Pa. - A new grant program aimed at helping small to medium sized hospital staffs keep informed on latest developments in relevant esearch areas has been announced by the Institute for Scientific nformation. Under the program, qualifying hospital libraries can ubscribe to a selected group of health care presentations from ISI t 25 per cent less than the normal hospital rate.

ortification with ron Is Needed

Seattle, Wash. - Food should be fortified with iron to reduce widespread iron deficiency in women and infants, reported two Seattle researchers in JAMA. Drs. Clement A. Finch and Elaine R. Monsen said that ron deficiency affects some 25 million women and more than one quarter of babies in late infancy. Primary problem is limited amount of ron which can be absorbed from the modern diet.

icotine May Cause uodenal Ulcers

Kalamazoo, Mich. - Nicotine may be an indirect cause of higher incidence of duodenal ulcers among smokers than non-smokers, according to r. Andre Robert, Upjohn research scientist. Studies based on rats nowed a small amount of nicotine injected caused a doubling of lcer incidence. Dr. Robert suggests that nicotine sensitizes the at to ulcer formation by reducing secretions of pancreatic juice.

egally Blind May ow Be Able to Read

Long Island, N.Y. - Opaque Systems, Ltd., has developed an instrument to enable legally blind persons to read. Known as the Optiscope Enarger, it allows those with low vision capability (20/200 vision r less) to read ordinary books and printed or graphic material by rojecting a greatly enlarged, illuminated image onto a built-in, x 14 in. screen made of polarized material to reduce harmful glare.

roposal Would xpand NIH

Washington, D. C. - The National Heart and Lung Institute would be converted into a super NIH research unit comparable to the expanding Natonal Cancer Institute under a proposal introduced in both Houses f Congress. Sponsors of the $1.3 billion bill are Sen. Edward ennedy (D.,Mass.) and Rep. Paul Rogers (D., Fla.), who authored egislation last year which substantially enlarged NCI programs.



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The highly effective candicidin for all your vaginal moniliasis patients.

First came CANDEPTIN (candicidin) Tablets for intravaginal use. Then CANDEPTIN Ointment to treat labial involvement and for intravaginal use. Now unique **CANDEPTIN VAGELETTES**—candicidin ointment in soft gelatin capsules—extend the range of CANDEPTIN therapy to even your pregnant and virginal patients (you merely cut off the narrow tip and extrude the contents through the intact hymen).

Clinical proof of potency

CANDEPTIN brings your patients prompt relief of itching, burning and discharge—usually within 72 hours.[1] A single 14-day course of treatment is usually all that's required for a complete cure.[2,3,4]

Significantly more potent *in vitro* than nystatin.[5] CANDEPTIN Tablets and Ointment have shown clinical cure rates of 90% and higher in both pregnant and non-pregnant patients.[1,4,6] And in recent studies of **CANDEPTIN VAGELETTES** Vaginal Capsules involving both pregnant and non-pregnant patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Only CANDEPTIN gives you a dosage form for every therapeutic need, plus *eight years' clinical proof* of potency. Consider CANDEPTIN for your next vaginal moniliasis patient.

CANDEPTIN®
(candicidin)

Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)
Store under refrigeration to insure full potency.
Federal law prohibits dispensing without prescription.
References: 1. Olsen, J.R.: Journal-Lancet *85*: 287 (July) 1965. 2. Giorlando, S.W.: Ob/Gyn Dig. *13*: 32 (Sept.) 1971. 3. Decker, A.: Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. 5. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H.J.: Maryland M.J., *15*: 36 (Feb.) 1966.

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CANDEPTIN®
(candicidin)
Vaginal Tablets
Vaginal Ointment
and VAGELETTES™
Vaginal Capsules

Cardiology Course Set for April

The American College of Physicians will present cardiology for the internist April 5-7 at the Methodist Hospital Assembly Room in Houston, Tex.

Co-directors are Drs. Henry D. McIntosh and Robert J. Luchi. The course is acceptable for 21 hours credit toward the AMA "Physician's Recognition Award" and the American Academy of Family Practice.

One day will be devoted to consideration of coronary artery disease, another to valvular heart disease, and a third day to disturbances in cardiac conduction and rhythm. Small group workshops will be held on two afternoons on cardiac auscultation, exercise testing, cardiac pathology, cardiac radiology and electrocardiography.

Tuition for members and Fellows is $80 and for nonmembers, $125. For further information, contact the Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine Street, Philadelphia, Penn. 19104.

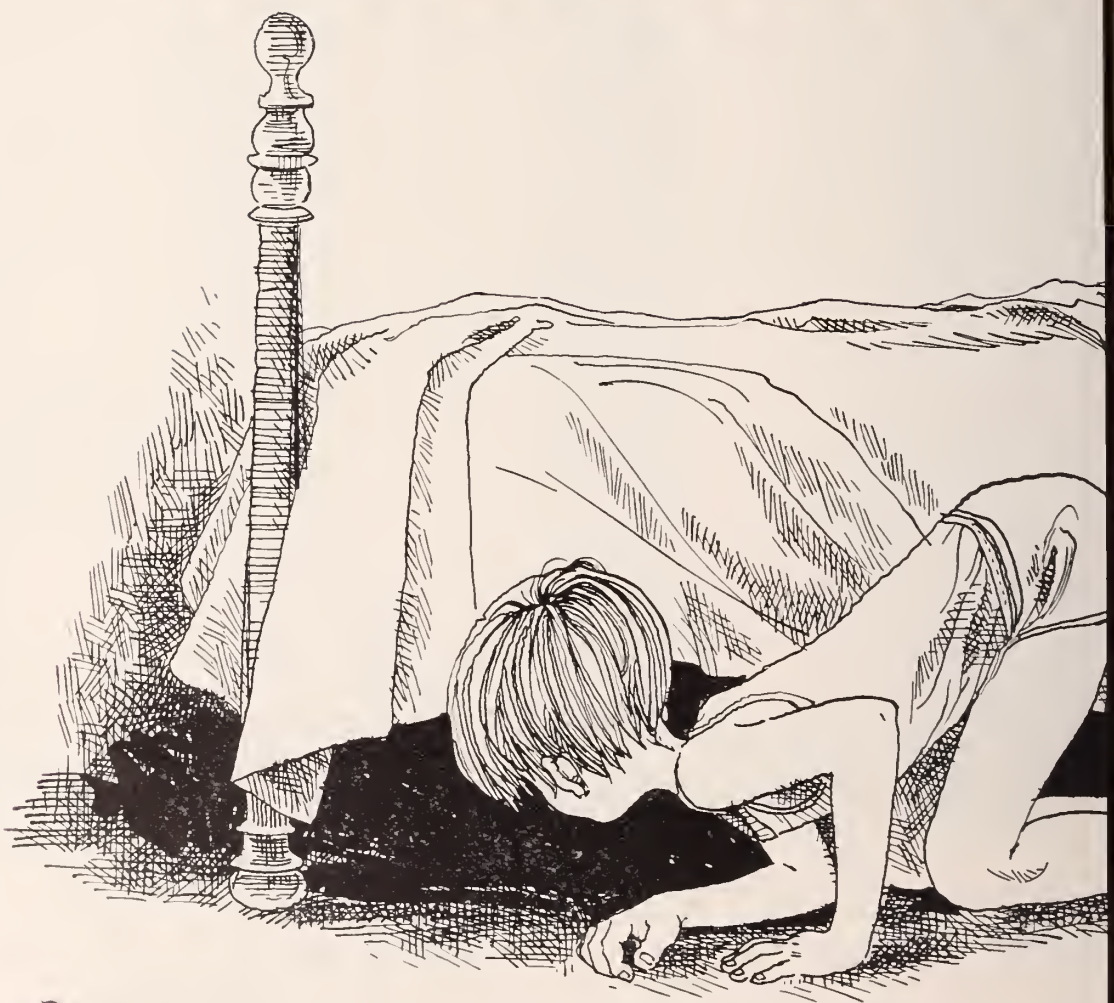
Missouri Establishes Bone Tumor Center

One of three newly established Bone Tumor Referral Centers in the nation is located in the Department of Radiology at the University of Missouri Medical Center, Columbia. Designed to help physicians in the diagnostic evaluation of bone tumor x-rays, the centers (also in Los Angeles and Philadelphia) were established at the recommendation of the Commission on Cancer of the American College of Radiology.

A physician wanting assistance in the diagnosis of bone tumors can use the center by sending the problem x-rays along with the resume of the patient's history and findings. The radiograph will be reviewed and the report sent to the doctor by mail or long distance telephone if desired or indicated. There is no charge for this service. Consultation will include the evaluation of the roentgenograms indicating rate of growth and predicted histologic nature and an evaluation of the histologic material, if available, by a skilled pathologist.

Radiographs and patient resumes may be sent to Dr. Gwilym S. Lodwick, Professor and Chairman of the Department of Radiology, University of Missouri Medical Center, Columbia, Mo. 65201.

Arthur los



A single-dose, non-staining anthelm

is pinworms...



with just one non-staining dose of Antiminth (pyrantel pamoate) Oral Suspension.

Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion. Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia

Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

nt: **new ANTIMINTH®**

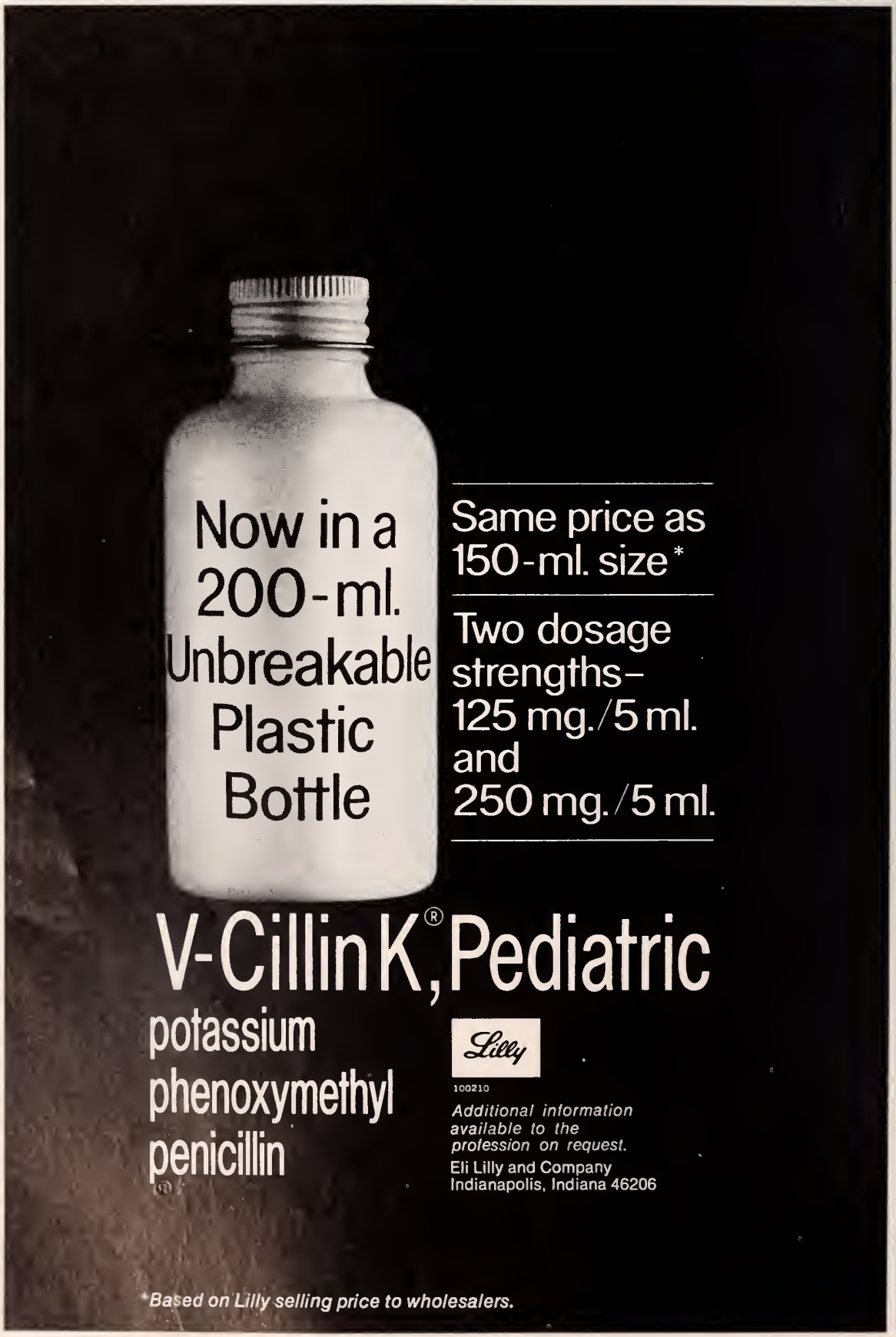
(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml

ORAL SUSPENSION

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Now in a 200-ml. Unbreakable Plastic Bottle
Same price as 150-ml. size*
Two dosage strengths– 125 mg./5 ml. and 250 mg./5 ml.
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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
April 1972, Vol. XIII, No. 4

ORIGINAL PAPERS

The Tuberculin Test as a Routine Office Procedure

LEE R. REID, M.D.
Jackson, Mississippi

THE GENERALLY ACCEPTED practice of using isoniazid as a prophylactic for prevention of progression of primary tuberculosis, or inactive disease at any stage from reactivating, has cast new light on the importance of locating those individuals who have been infected with M. tuberculosis. This can only be accomplished through widespread use of the tuberculin test, properly performed and interpreted. It is essential that every physician recognize the importance of tuberculin testing as an office procedure of equal importance with other more familiar procedures such as blood counts, serologies, urinalysis or immunizations.

Widespread utilization of this test as a routine procedure has been hampered in the past by numerous technical and practical problems, now largely resolved. Pertinent factors are:

(1) recognition of the significance of a positive skin test as an indication of infection and the prime indicator of those at high risk of active disease;

(2) development of stable, standard purified protein derivative (PPD) in liquid form, capable of reproducible results, and retaining its potency for up to a year;

(3) availability of disposable tuberculin syringes with attached intradermal needles at nominal cost;

Consultant in Diseases of the Chest, Tuberculosis Control Unit, Mississippi State Board of Health.

(4) alternatives (acceptable) to the patient's having to return to the office for interpretation; and

The author has summarized comprehensive information on the tuberculin test in an effort to popularize the test as a routine office procedure. He points out that the practice of using isoniazid as a prophylactic for prevention of progression of primary tuberculosis, or inactive disease at any stage from reactivating, has cast new light on the importance of locating those individuals who have been infected.

(5) a principle, now widely accepted, that a significantly positive tuberculin (10 mm or more induration to 5 TU, PPD, Mantoux) even with negative x-ray, warrants prophylactic therapy with isoniazid.

The literature on tuberculin testing is so voluminous that practitioners usually do not have time to review it. The present article will attempt to present the fundamentals of tuberculin testing in a convenient form for quick reference.

As an office procedure, the Mantoux test should be used and will be described. For all practical purposes, PPD—5 TU (tuberculin units), sometimes called Intermediate Strength, should be used

as a routine office procedure.

Materials needed are:

(1) Tuberculin syringes—glass or plastic;

(2) Needles, 26G x ⅜ blunt (for convenience in office practice, syringes and the appropriate needles are sold in disposable unit form); and

(3) Tuberculin—PPD-S—5 TU (Purified Protein Derivative-Standard) to distinguish from PPD-B for the Battey organism and other atypical mycobacterial antigens, 5 tuberculin units.

Volar surface is usually selected for the test. 0.100 cc of PPD is injected into the skin with the bevel of the needle up. If a wheal of 6 to 10 mm does not result, the technique is wrong. Usually the solution has been lost beneath the skin where it is useless. If the solution is deposited in the deepest layer of the skin, its reliability is also questionable. If the wheal does not show tiny pitting and dimpling of the skin, the solution may be too deep.[9]

Occasionally the needle point is dislodged during injection and some of the solution either sprays into the air or forms a drop on the surface of the skin. If for any reason a wheal of insufficient size, i.e. one of less than 6 mm, occurs or the wheal does not show pitting or dimpling as noted above, one should not hesitate to repeat the injection into another skin area two or more inches away or to use the other arm.

The oozing of a drop of the tuberculin solution from the needle tract is not important if a wheal over 6 mm in diameter has been attained. A drop of blood from the needle track is of no significance.

READING

The Mantoux test described above should be interpreted on the second or third day after injection (48 to 72 hours). If the reaction is robust, it will remain present for a longer time but a borderline reaction read after 72 hours may be the source of some error.

An area of erythema, if present, does not count in the reading. The area of induration is usually well marked with fairly easily defined borders. It sometimes helps to mark the border of the induration with a ball point pen to aid in measurement. Measure the width of the induration in its longest diameter and record in millimeters. If vesiculation and/or central necrosis of the indurated area happens (a rare occurrence), it should be recorded.

In interpretation, a positive reaction consists of 10 mm or more of induration. This indicates that this person either now has tuberculosis or in the past has been infected with M. tuberculosis. It does not mean that the individual has simply been "exposed to tuberculosis." There is some evidence put forth of late that a positive test is an indication that there are viable M. tuberculosis organisms in the patient's body.[2]

Such a positive reaction demands an immediate chest x-ray film. If the film is negative, this individual should be put on chemoprophylaxis consisting of isoniazid, 300 mg per day for adults and 10 mg per kilo for children for one year. Due attention should be directed toward jaundice or other evidence of liver damage while taking the drug. Such reactions to INH are extremely rare. However, isoniazid used as a prophylactic measure should probably be discontinued if liver disease occurs.

If any evidence of lung disease is present by x-ray, the individual should be studied carefully to determine whether active tuberculosis is present by sputum examination, careful history, etc. Precautions should be practiced around the home until sputum cultures are reported.

A doubtful reaction consists of 5 mm through 9 mm of induration, and a repeat tuberculin test is indicated to be sure the technique was not faulty. This reaction might indicate infection either past or present with one of the nontuberculosis "unclassified" mycobacteria. Since some of these organisms can cause progressive disease in humans, their presence should be investigated with sputum cultures and if possible, specific skin tests.

The difference, for instance, between an 8 mm or 9 mm and a 10 mm reaction, however, should not exclude a chest x-ray or even chemoprophylaxis. Medical judgment is required in these borderline cases. Consideration should be given to the patient's background such as a history of contact with tuberculosis, etc., when such a problem arises. When doubtful, it should be pointed out that isoniazid is a very safe drug and tuberculosis is a dangerous disease, even in these days of chemotherapy. Remember also that the drug is taken for one year only, but the danger of clinical tuberculosis is present for the lifetime of individuals who are considered as particularly vulnerable after having been infected with M. tuberculosis.

A negative reaction consists of 0 mm through 4 mm of induration. There is little likelihood of tuberculosis in these individuals; particularly if due regard has been accorded the causes for false negative reactions given below. In tuberculosis contacts, the test should be repeated at regular intervals. In a household contact with an active case, the test should be repeated at three month intervals.

False positive tuberculin reactions may result from:

(1) cross reaction with nontuberculosis mycobacteria ("atypical, unclassified" mycobacteria). Reactions to those organisms are usually less than 10 mm to PPD-S—5 TU;

(2) reading of erythema instead of induration; and,

(3) B.C.G. vaccine.

False negative tuberculin reactions are seen in:

(1) overwhelming tuberculosis infection;

(2) Sarcoidosis;

(3) adrenal corticosteroid hormones or immunosuppressive drugs being taken or having been taken lately. With reference to the corticosteroids, systemic use of these drugs can depress the sensitivity of the tuberculin test to a variable degree after only five days of therapy with them. When such corticosteroids are discontinued, reactibility returns in from seven to twenty-eight days;[3, 4]

(4) certain exanthemata such as measles or recent measles vaccination and possibly, other live virus vaccinations. Until more definitive information is available, it is best to perform the tuberculin test three to five days before giving a live virus vaccine or delay the test at least a month after either vaccine or natural infection.[8, 12] Influenza vaccination does not affect the reaction because it is not a live virus vaccine;[5]

(5) newborn during first six weeks of life;

(6) recently infected with tuberculosis (2 to 10 weeks) and too early to have developed a positive test;

(7) improper technique or faulty tuberculin;

(8) waning sensitivity in the elderly;[1]

(9) severe febrile illness, especially in the malnourished; and

(10) Two to five per cent biologic false negatives for unexplained reasons.

NOTES OF IMPORTANCE

(1) Repeat testing of a noninfected individual does not sensitize to tuberculin.[1] Repeat testing in the individual infected with tuberculosis, however, may produce a "booster effect."

(2) A positive tuberculin skin test demonstrates that infection is present but does not necessarily signify activity.

(3) The test is not contraindicated in early childhood or infancy. It is probably not reliable before six weeks of age because of immaturity or child's immune response mechanism.

(4) The test is important in all age groups. A common misconception is that most adults have been infected, whereas in truth, many have not.

(5) There is a tendency for the test to remain positive for years or for the lifetime of the individual until advancing age may modify it.[1] This does not mean that "once positive, always positive" by any means, since conversion to negative can and does occur at all ages.

(6) In general, the stronger (larger) the reaction, the greater the risk of clinical tuberculosis developing.[7] It is probable that the stronger the reaction, the more the likelihood of active disease being present.[9]

(7) The disadvantage of having to return in two or three days for reading of the test can be minimized when one realizes that it takes but a few seconds to measure the site of reaction. An office nurse can measure it if necessary, but the physician should see the patient if the test is positive or doubtful. If the physician desires, a patient can be referred to any county health department with a note requesting measurement of the reactive area and report to physician. If referred by an out-of-town physician, the patient can be referred back to him for measurement.

(8) Skin testing usually can be safely done in individuals who are "allergic" in the general sense of the word.

(9) Diabetics with poor healing are no contraindication to the test. Reasonable care of the site if vesiculation or necrosis occurs is, of course, necessary.

(10) Keloid formation is possible at site of test and one prone to keloid formation should be warned of this possibility.

(11) In children, scratching of the site will not affect the usefulness of the test, but, as in the case of smallpox vaccination, secondary infection should be guarded against.

(12) A large area of erythema without demonstrable induration requires a repeat test since this usually means a subcutaneous rather than an intracutaneous injection into a sensitive individual.

(13) When chemoprophylaxis is indicated, the physician can either supervise the treatment or refer patient to the local county health department to be furnished the drug and followed by them.

(14) As a routine office procedure, other strengths of tuberculin such as a 1 TU ("First Strength") or 250 TU ("Second Strength") tuberculin have little usefulness.[1]

(15) To obtain an accurate test, the tuberculin should never be transferred from one container to another lest its potency be reduced by absorption by the new glass or plastic container. Skin tests should be given as soon as practical after the syringe has been filled, for the same reason.[1]

(16) Discomfort from severe reaction can be treated by warm, wet compresses. In early stages, some have reported favorably on the use of corticosteroid ointments and creams.[6] These seem to have little effect after the reaction has matured. The local use of hydrocortisone does not affect the reliability of the test.[11] One study of a small number of cases indicated no benefit from the use of hydrocortisone.[11] Antihistamines seem to afford little benefit.

DISCUSSION

(1) A properly performed and interpreted negative tuberculin test, after considering and eliminating the causes of a false negative reaction enumerated above, is excellent proof of the absence of tuberculosis in an overwhelming percentage of cases.

(2) A properly performed and interpreted positive tuberculin test, 10 mm, and over, after considering and eliminating the causes of a false positive reaction enumerated above, is almost certain proof of an infection, either presently or in the past, with M. tuberculosis. As mentioned previously but repeated here for emphasis, the positive test does not indicate whether or not the disease is active at the time of the test. This will have to be determined by further study.

(3) In individuals with a negative test but in close contact with an active case of tuberculosis, a series of tests should be repeated at intervals of three months even though the contacts may be taking prophylactic isoniazid. Bear in mind that repeated tests, as mentioned above, do not themselves cause sensitivity if no tuberculosis is present.

(4) Conversion from a negative to a positive tuberculin test (10 mm or more induration) indicates that the person has been infected during the interval. If the conversion occurs in a short interval of time, such as between tests three months apart, chemotherapy or chemoprophylaxis is mandatory, and careful study by x-ray is urgent. If the interval between the negative and positive test is long, measured in years for instance, chemoprophylaxis and study is also important but not as urgent as those who converted during a short period of time.

(5) Ninety-five per cent of tuberculosis patients react to 5 TU with 10 mm or more induration and only 16 per cent have reactions less than 13 mm. This finding is constant throughout the world.[10]

(6) "Apparently healthy individuals having tuberculin reactions of 10 to 15 or more millimeters to 3 TU or 5 TU doses of tuberculin have five times the risk of developing clinical tuberculosis in the next three years as those individuals having reactions of less than 10 mm."[9]

(7) The use of the tuberculin test as a routine office procedure has been discussed. Attention should be directed also to the use of the test in patients hospitalized by practitioners in which the test was not done in the office.

SUMMARY

In an effort to popularize the tuberculin test as a routine office procedure, information on the test has been summarized.

Because of widespread use of isoniazid as chemoprophylaxis for tuberculosis, it becomes increasingly important to determine, through tuberculin testing, those individuals who have been infected with M. tuberculosis. In the past, most of the tuberculin testing has been done by public health agencies. The private physician is urged to assume his rightful place in promoting tuberculosis control in Mississippi by the routine use of the test as an office procedure. ★★★

P.O. Box 1700 (39205)

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ADDENDUM

On Jan. 28, 1972, the Department of Health, Education and Welfare released a memorandum to all health departments and agencies responsible for tuberculosis control with regard to tuberculin potency.

It has become increasingly evident that the tuberculin available to private practitioners in tablet form packaged with a vial of diluent has been found to be of variable potency if allowed to stand in the bottle in the reconstituted state. It also loses potency if allowed to remain in the syringe for any appreciable length of time. This is felt to be due to the tuberculin being absorbed by the glass of the bottle or syringe or plastic of the disposable type of syringe. It has been found that the addition of a detergent (Tween 80) prevents or delays absorption of the tuberculin by the glass or plastic container. There is little doubt that some of the discrepancies in statistics with regard to the results of tuberculin testing in the past has been due to this unsuspected loss of potency. For this reason, on Jan. 18, 1972, the Division of Biologic Standards, National Institute of Health, called together an Ad Hoc Committee to make recommendations regarding the subject. The following three recommendations were made:

(1) that the tableted forms of PPD tuberculin be replaced as soon as possible (but not to exceed 12 months) with liquid PPD tuberculin containing Tween or a product of comparable stability;

(2) that during the interim period, *tableted PPD tuberculins now on the market should only be used within 30 minutes of reconstitution,* and injected *immediately* after loading the syringe;

(3) that all Tween-containing PPD tuberculins, or products of comparable stability, licensed for use in humans should be bio-equivalent to 5 TU PPD-S in phosphate buffer (without Tween) as demonstrated in humans.

It is therefore recommended that physicians using the tablet form of tuberculin follow the above recommendations.

Attention is called to the fact that no direct harm can be done by the use of the tablet form of tuberculin that has been in use for many years. The reason for the above precaution is that a false negative tuberculin could result from the use of a tuberculin that had lost some of its potency by standing in solution.

TALK ABOUT CONFUSING!

Seven-year-old Ronnie had been using public restrooms for years, so his parents thought nothing of sending him down the aisle alone on the airplane. Two minutes later he was back and asked, "Which am I—'Occupied' or 'Vacant'?"

Radiologic Seminar CXVI: Pelvic Vein and Inferior Vena Caval Thrombosis: A Case Report

WILLIAM F. LYNCH, JR., M.D.
Jackson, Mississippi

MANY RECENT ARTICLES have been written on the correlation of venous thrombosis in women on birth control hormones. The purpose of this paper is not to add to this controversy, but to report an interesting case of pelvic vein and inferior vena caval thrombosis, and the radiological approach to the diagnosis.

The average normal incidence of superficial and deep vein thrombo-embolic disease in women of child bearing age is 2.2 cases per thousand women per year. Available data does not demonstrate that women are more susceptible to thrombo-embolic phenomena while on birth control oral contraceptives. One study reports only 0.97 cases per thousand women per year.[1]

CASE REPORT

This 21-year-old inhalation therapist was admitted to Hinds General Hospital complaining of pain in her left leg and left groin associated with swelling and aching of her toes for two days. Physical examination showed the classical signs of acute superficial thrombophlebitis. Her past history did indicate that she was taking a monthly cyclic oral contraceptive birth control medication. She was treated on a conservative regime, responded well, and after six days was discharged to home.

Approximately six days later she was readmitted to Hinds General Hospital, but this time she had complaints related to her right leg and right groin. Again she had the classical signs of acute superficial thrombophlebitis. With the history of right groin tenderness with pain, and previous history of left groin pain on her first admission, it was felt she probably had pelvic vein thrombosis.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Hinds General Hospital, Jackson, Miss.

Radiological evaluation of her pelvic veins was initially attempted by bilateral common femoral vein punctures without success. Old blood clots were aspirated from each groin area. Injection of her greater trochanters or pubic ramii, under general anesthesia, was not attempted as recommended by some. Instead needles were placed into the veins of each foot and routine venographic studies were obtained of her upper and lower legs and pelvic area. (See Figures 1, 2, 3, and 4.) This showed essentially thrombosis of the deep systems of both upper and lower legs with absence of filling of the pelvic veins, but filling of collateral channels of the anterior abdominal wall. This study well demonstrated why the common femoral approach was unsuccessful.

The inferior vena cava was still in question. A right internal jugular puncture was made and a catheter was threaded through the heart into the vena cava, proximal to the renal veins, and the vena cava was shown to be patent. (See Figure 5.) The catheter was then passed into the lower vena cava, distal to the renal veins, and thrombosis of the lower vena cava was shown. (See Figure 6.)

The following day she was submitted to surgery, and a vena caval ligation was performed along with a thrombectomy of her vena cava, pelvic veins, and deep femoral veins. She has done well after surgery without symptomatic leg edema and without embolization.

DISCUSSION

There has been a continuing controversy over whether thrombosis begins in the calf and progresses upward as reported by Nicolaides[2] using I^{125} labeled fibrinogen and ascending functional venography. His group reported that the majority of thrombi begin in the soleal veins of the calf and progress upward. Clinical signs of venous throm-



Figure 1. Left lower leg venography, injection left foot vein.



Figure 2. Right lower leg venography, injection right foot vein.



Figure 3. Left upper leg and pelvis, injection left foot vein.



Figure 4. Right upper leg and pelvis, injection right foot vein.



Figure 5. Upper vena caval injection, proximal to renal veins.



Figure 6. Lower vena caval injection, distal to renal veins.

bosis were unreliable in 53 per cent of their cases.

Mahaffy[3] found that 70 per cent of people presenting with pulmonary emboli had iliofemoral thrombosis and virtually all major emboli come from an iliofemoral source. Seven of 113 cases died with iliofemoral thrombosis, whereas, 0 of 31 cases of emboli from peripheral sources died. If there is deep vein iliofemoral thrombosis 25 per cent of these cases will have a fatal major pulmonary embolization. Patients with iliofemoral thrombosis may have no signs of deep vein thrombosis, but they are under severe risk of death from fatal embolization. Iliofemoral phlebography in their hands was done in persons with (1) pulmonary embolization without leg signs, (2) signs of iliofemoral thrombosis, and (3) persistent or recurrent deep peripheral vein thrombosis. Seventy-six per cent suffered embolization under anti-coagulant medication, and for this reason thrombectomy was recommended when iliofemoral thrombosis was encountered. The iliofemoral segment was involved with pulmonary embolism in 57 per cent of their cases. They concluded that, contrary to belief, iliofemoral thrombosis is a common occurrence and persons with iliofemoral thrombosis are under risk of sudden death.

SUMMARY

A case of diffuse venous thrombosis is presented with the diagnosis of inferior vena caval thrombosis made by catheterization via a transjugular retrograde approach. It would seem that iliofemoral thrombosis is a more common occurrence than believed, and the cause of the majority of fatal embolization. Surgical correction by thrombectomy may be the recommended procedure.

Hinds General Hospital (39204)

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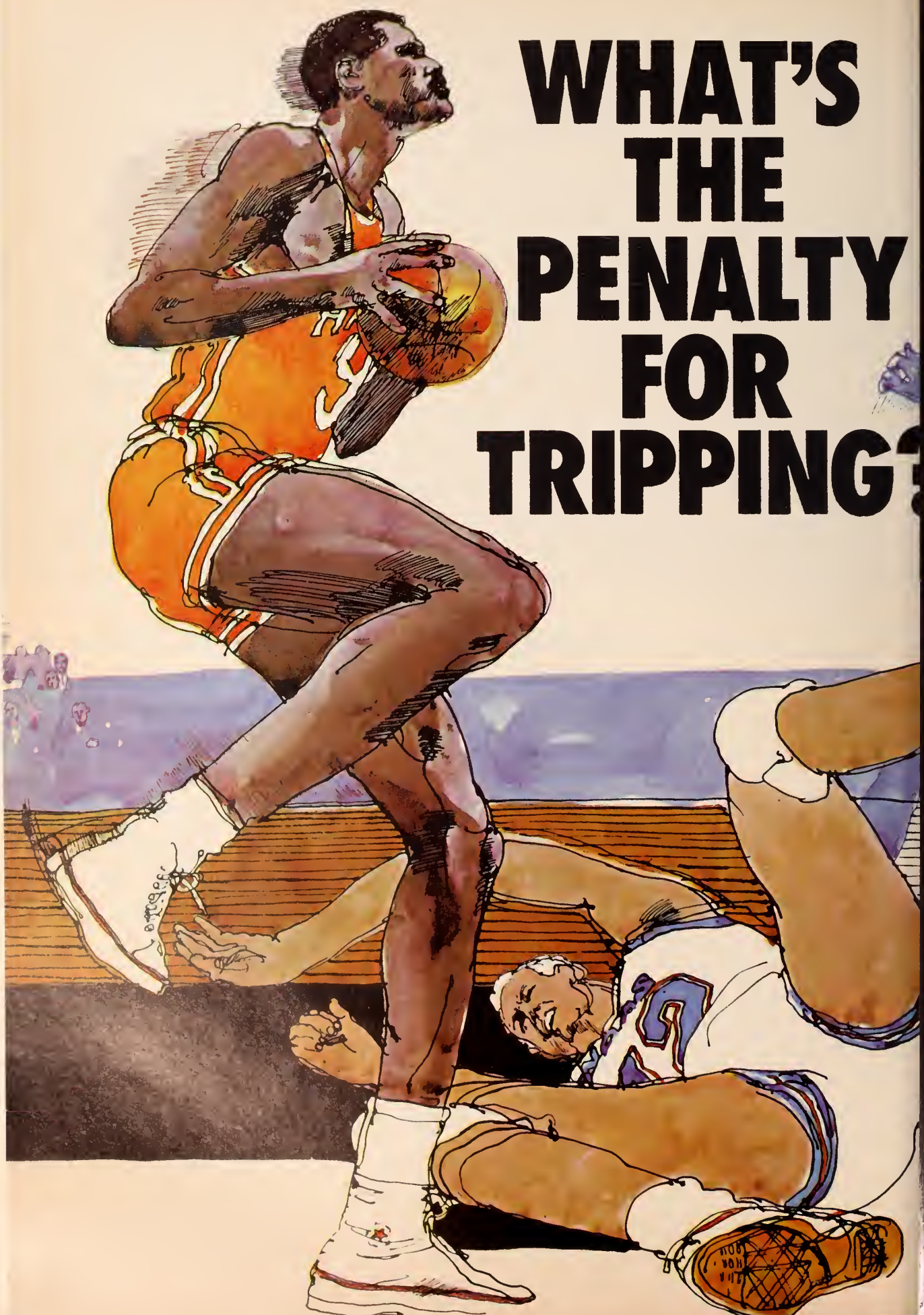
ontraindications. Children 14 years or less; senile atients; history or symptoms of GI inflammation or ceration, including severe, recurrent or persistent yspepsia; history or presence of drug allergy, blood yscrasias, renal, hepatic or cardiac dysfunction; ypertension, thyroid disease, systemic edema, stomatitis and salivary gland enlargement due to the rug; polymyalgia rheumatica and temporal arteritis. atients receiving other potent chemotherapeutic agents or long-term anticoagulant therapy.

Warnings. Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent otent chemotherapy affect incidence of toxic reac- ions. Carefully instruct and observe the individual atient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the rug. Use lowest effective dosage. Weigh initially npredictable benefits against potential risk of severe ven fatal, reactions. The disease condition itself is

altered; the drug itself may [illegible] ter of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. [illegible] fatal blood dyscrasias, including agranulocytosis, may occur suddenly despite regular hematologic [illegible] may become manifest days or weeks after initiation of drug. Any significant change in white cell [illegible] relative decrease in granulocytes, appearance of immature forms, relative [illegible] in hematocrit or hemoglobin [illegible] immediate cessation of therapy are [illegible] hemato- logic investigation. Unexplained bleeding, purpura, CNS, adrenal, and GI [illegible] Therapy may potentiate action of insulin, oral [illegible] and sulfonamide-type agents. Careful observation [illegible] taking these agents. Nephrotic [illegible] and myxedema have been reported. The drug reduces iodine uptake by the thyroid. Rarely, [illegible] a significant toxic symptom with [illegible] ophthalmological examination. Swelling of the face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions. The following should be performed at regular intervals. Carefully observe the patient for [illegible] being treated and detect onset of drug reactions or adverse reactions; complete physical examination, including check of patient's weight; complete blood, [illegible] especially for the aging or anyone over [illegible] week, check pertinent laboratory findings. Caution patients about participating in activities requiring alertness and coordination, as drowsiness may occur. Cases of leukemia have been reported in patients with a history of brief and long-term therapy. The majority of these patients were over forty. Remember that arthritis-type pains can be the presenting symptom of leukemia.

Adverse Reactions. The [illegible] of this medication can lead to serious results. Review patient information before beginning therapy. Untoward effects [illegible] acute and recent ulcerative gastritis and duodenitis with perforation and hemorrhage, ulceration and perforation of large bowel, acute GI bleeding, [illegible] anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea. [illegible]


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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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DZ-106

104th Annual Session

Mississippi State Medical Association
May 8-11, 1972
Biloxi

MISSISSIPPI'S GULF COAST will become the state's medical capital May 8-11 as the 104th Annual Session of the association gets underway at the Sheraton-Biloxi. Two plenary sessions on socio-economics, three general scientific sessions involving the seven formal sections, fifteen specialty groups, three medical alumni occasions, technical and scientific exhibits, the House of Delegates, and a host of fellowship events are slated for the four-day meet.

Dr. Arthur E. Brown of Columbus, association president, will address the opening meeting of the House of Delegates on May 8. House Speaker William E. Lotterhos of Jackson and Vice Speaker John B. Howell, Jr., of Canton said that reports and resolutions will be presented at the opening meeting. Final actions will come on May 11 when 1972-73 officers are elected.

Dr. Charles R. Jenkins of Laurel will be inaugurated president for the new year during closing ceremonies on the final day.

Dr. Raymond S. Martin, Jr., of Jackson said that the Scientific Assembly will open on Tuesday morning, May 9, and continue through Thursday noon. New this year will be plenary sessions on Tuesday and Wednesday mornings on medical care foundations and peer review and professional corporations and liability. Dr. Martin heads the group which has planned and scheduled the general and specialty sessions, exhibits, and fellowship occasions.

Principal speaker for the annual session is Dr. Wesley W. Hall of Reno, Nev., president of the American Medical Association. He is scheduled to address the opening meeting of the House of Delegates on May 8, Dr. Brown said.

The Woman's Auxiliary will conduct its 49th Annual Session concurrently during May 8-10, also headquartering at the Sheraton-Biloxi, according to Mrs. T. E. Ross, III, of Hattiesburg, state president. Mrs. Clarence H. Webb, Jr., of Jackson will be inaugurated 1972-73 president at the meeting. General chairman for the ladies' meet is Mrs. Robert A. Little of Gulfport.

Medical alumni occasions are set for Monday and Tuesday evenings, and the association cocktail party and fellowship hour is the Wednesday feature.

The Sheraton-Biloxi luxury hotel will again host the Annual Session. Located immediately east of the Broadwater Beach Hotel, the relatively new complex consists of a nine-story tower fronting on the Gulf with five connected two- and three-story lanai units on the north or back. The Sheraton-Biloxi is accepting reservations subject to sell-out, after which registrants will be given priority at the adjacently-sited Ramada Inn and Holiday Inn.

OFFICIAL CALL

To all members of the Mississippi State Medical Association:

The 104th Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Monday, May 8, 1972, pursuant to Article V of the Constitution. The House of Delegates will be convened at 9 o'clock in the morning at the Sheraton-Biloxi on May 8.

The Scientific Assembly, consisting of the general sessions, will meet during May 9-11, 1972.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

ARTHUR E. BROWN
PRESIDENT

RAYMOND S. MARTIN, JR.
SECRETARY-TREASURER

STATE OFFICERS 1971-1972



DR. BROWN

PRESIDENT
ARTHUR E. BROWN
Columbus

PRESIDENT-ELECT
C. R. JENKINS
Laurel

SECRETARY-TREASURER
RAYMOND S. MARTIN, JR.
Jackson



DR. JENKINS

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LIVING PAST PRESIDENTS

James Grant Thompson, Jackson	1951-52
Lamar Arrington, Meridian	1952-53
S. Lamar Bailey, Kosciusko	1955-56
H. C. Ricks, Jackson	1956-57
Howard A. Nelson, Greenwood	1957-58
Guy T. Vise, Meridian	1958-59
Stanley A. Hill, Corinth	1959-60
G. Swink Hicks, Natchez	1960-61
Lawrence W. Long, Jackson	1961-62
C. P. Crenshaw, Collins	1962-63
Omar Simmons, Newton	1964-65
Everett Crawford, Tylertown	1965-66
James T. Thompson, Moss Point	1966-67
Temple Ainsworth, Jackson	1967-68
Joseph B. Rogers, Oxford	1968-69
James L. Royals, Jackson	1969-70
Paul B. Brumby, Lexington	1970-71

ACTIVITIES CALENDAR

REGISTRATION

General Registration for the Scientific Assembly and House of Delegates will be located at the second level (Grand Ballroom and Gulf Rooms) in the Sheraton-Biloxi. No person may be admitted to any activity of the annual session without first registering. Hours of registration will be 1:00 to 4:00 p.m. Sunday, May 7; 8:00 a.m. to 5:00 p.m., Monday, Tuesday, and Wednesday, May 8-10; and 8:00 a.m. to 1:00 p.m. Thursday, May 11. The Secretary's Office will be located off the West Lobby on the second level.

SATURDAY, MAY 6, 1972

9:00 a.m. Postgraduate Course in Obstetrics, Gulf Rooms A and B

SUNDAY, MAY 7, 1972

9:00 a.m. Postgraduate Course in Obstetrics, Gulf Rooms A and B
2:00 p.m. Miss. Association of Pathologists, Business Meeting, Empire Room
2:00 p.m. Miss. Radiological Society, Scientific Program, Boston Room
7:00 p.m. Miss Society of Anesthesiologists, Country Club of Jackson (Jackson, Miss.)

MONDAY, MAY 8, 1972

7:00 a.m. Reference Committees Breakfast, Gulf Room D
9:00 a.m. House of Delegates, Top of the Sheraton
9:00 a.m. Miss. Association of Pathologists Scientific Meeting, Gulf Room C
12:00 noon Miss. Orthopaedic Society Luncheon, Gulf Room D
12:00 noon Miss. Urological Society Luncheon and Meeting, Boston Room
1:30 p.m. Reference Committee on Reports of Officers and Board of Trustees, Gulf Rooms A and B
1:30 p.m. Reference Committee on Miscellaneous Business, Gulf Room C
1:30 p.m. Woman's Auxiliary Finance Committee, Directors Room
2:00 p.m. Miss. Commission on Hospital Care Meeting, Empire Room
3:00 p.m. Reference Committee on Medical Practices, Gulf Room C
3:30 p.m. Woman's Auxiliary Preconvention Board of Directors Meeting, Directors Room
3:30 p.m. Council on Constitution and By-Laws, Gulf Rooms A and B
4:00 p.m. Ole Miss Medical Alumni Business Meeting, Boston Room
7:00 p.m. Ole Miss Medical Alumni Cocktail Party, Gulf Rooms A, B, and C
8:00 p.m. Ole Miss Medical Alumni Seafood Jamboree and Dance, Grand Ballroom East

TUESDAY, MAY 9, 1972

7:30 a.m.	Woman's Auxiliary Continental Breakfast, Empire Room
8:30 a.m.	Woman's Auxiliary General Session, Top of the Sheraton
9:00 a.m.	Plenary Session on the Miss. Foundation for Medical Care and EMCRO, Grand Ballroom East
11:00 a.m.	Miss. Ob-Gyn Society Cocktail Party and Luncheon, Gulf Room D
11:00 a.m.	American College of Surgeons Business Meeting, Gulf Room C
12:00 noon	American College of Surgeons Luncheon and Scientific Program, Gulf Room B
12:00 noon	Fifty Year Club Luncheon, Boston Room
1:00 p.m.	Woman's Auxiliary Luncheon, Top of the Sheraton
2:00 p.m.	General Scientific Session, Grand Ballroom East
3:30 p.m.	Woman's Auxiliary Postconvention Board of Directors Meeting, Jackson Room
4:30 p.m.	Short Course in Practical Tonometry (Glaucoma) for Non-Ophthalmologists, Gulf Room C
5:30 p.m.	Tulane Medical Alumni Cocktail Party, Empire Room
6:00 p.m.	Tennessee Medical Alumni Cocktail Party and Dinner, Gulf Rooms C and D
7:00 p.m.	Flying Physicians Association Cocktail Party and Dinner, Gulf Rooms A and B

WEDNESDAY, MAY 10, 1972

7:30 a.m.	MSMA Past Presidents' Breakfast, Boston Room
8:30 a.m.	Woman's Auxiliary Past Presidents' Breakfast, Jackson Room
9:00 a.m.	Plenary Session on Professional Corporations and Professional Liability, Grand Ballroom East
11:00 a.m.	Short Course in Practical Tonometry (Glaucoma) for Non-Ophthalmologists, Gulf Room C
12:00 noon	Miss. Society of Internal Medicine Luncheon, Boston Room
12:00 noon	Miss. Academy of General Practice Luncheon, Top of the Sheraton
1:30 p.m.	General Scientific Session, Grand Ballroom East
1:30 p.m.	Nominating Committee, Gulf Room A
6:00 p.m.	Annual Association Cocktail Party, Grand Ballroom East

THURSDAY, MAY 11, 1972

9:30 a.m.	General Scientific Session, Grand Ballroom East
12:00 noon	Miss. EENT Association Luncheon, Gulf Room B
1:30 p.m.	House of Delegates, Top of the Sheraton
1:30 p.m.	Short Course in Practical Tonometry (Glaucoma) for Non-Ophthalmologists, Gulf Room C

EXECUTIVE BUSINESS



DR. LOTTERHOS

HOUSE OF DELEGATES

Monday, May 8, 1972
9:00 a.m.

Sheraton-Biloxi

William E. Lotterhos
Jackson, Speaker

John B. Howell, Jr.
Canton, Vice Speaker



DR. HOWELL

MEETINGS OF THE HOUSE OF DELEGATES

The opening meeting of the House will be called to order by the President, and the Speakers will announce the order of business. An open meeting, to which all members and ladies of the Auxiliary are invited, will feature addresses by Dr. Arthur E. Brown, the president, and Dr. Wesley W. Hall, president of the American Medical Association. The adjourned meeting of the House will convene at 1:30 p.m. on May 11.

REFERENCE COMMITTEES

Reports of Officers and Board of Trustees, May 8, Gulf Rooms A and B, 1:30 p.m.

Miscellaneous Business, May 8, Gulf Room C, 1:30 p.m.

Medical Practices, May 8, Gulf Room C, 3:00 p.m.

Constitution and By-Laws, May 8, Gulf Rooms A and B, 3:30 p.m.

Nominating Committee, May 10, Gulf Room A, 1:30 p.m.

THE SCIENTIFIC ASSEMBLY



DR. MARTIN

COUNCIL ON SCIENTIFIC ASSEMBLY

RAYMOND S. MARTIN, JR., Chairman

THE COUNCIL

MYRON W. LOCKEY, Chairman, EENT
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EUGENE F. WEBB, Chairman, GENERAL PRACTICE
W. BOYCE WHITE, Secretary

DAVID M. OWEN, Chairman, MEDICINE
S. H. MCDONNIEAL, JR., Secretary

WILLIAM R. RAULSTON, Chairman, OB-GYN
WARREN PLAUCHE, Secretary

LOUIS C. LEHMANN, Chairman, PEDIATRICS
JOHN R. JACKSON, JR., Secretary

JAMES C. TOTTEN, JR., Chairman, PREVENTIVE MEDICINE
FRANK M. WIYGUL, JR., Secretary

WILLIAM L. WEEMS, Chairman, SURGERY
BENTON M. HILBUN, Secretary

MEDICAL INHOUSE TELEVISION

MSMA will present for the first time this year 12 hours of lectures, papers and top medical presentations in all 20 specialties on special channel 2 inhouse television at the Sheraton-Biloxi, May 8-11. The nightly telecasts, taped from recent AMA conventions, are made possible through the AMA's Communications Division and sponsored by Roche Laboratories.

SCIENTIFIC AND TECHNICAL EXHIBITS

Grand Ballroom, Sheraton-Biloxi

CONDUCT OF THE SCIENTIFIC ASSEMBLY

The order of exercise, papers, and discussion as set forth in the official program shall be followed until completion. All papers read before the association shall become its property. Each paper must be read by its author and deposited with the Secretary (or Chairman) when read.

THE SCIENTIFIC EXHIBIT

Physicians, foundations, organizations, and major medical institutions will present the Scientific Exhibit. Physician-members of the Mississippi State Medical Association are eligible for the Aesculapius Award given for excellence of presentation, quality of content, and originality. Others may not participate in this competition, but they are eligible for the association's Scientific Achievement Award, a sculptured bronze medallion, in recognition of the best presentation by a nonmember. The Scientific Exhibit is located in the Grand Ballroom.

EXHIBITS AND AUTHORS

"Myocardial Revascularization"
John L. Ochsner, Noel L. Mills, Charles B. Moore, J. Philip Bower, and James Arens, New Orleans

"Some Pertinent Aspects of Microneurosurgery"
John W. Laing and Robert R. Smith, Department of Neurosurgery, University Medical Center, Jackson

"Coronary Artery Disease: Surgical Treatment"
Charles W. Pearce, New Orleans

"Flying Physicians Association"
Jack A. Stokes, Pontotoc

"Diagnosis of Coronary Artery Disease"
H. Davis Dear, Jr., Gene Rester, Linda Temple, Cynthia Roach, and Diane Parkes, Jackson

"Tonometry for Non-Ophthalmologists"
Mississippi EENT Association and Mississippi Society for Prevention of Blindness

"Prevention of Blindness—Educational Programs"
Mississippi Society for Prevention of Blindness

"Aorto-Coronary Bypass Surgery for Relief of Angina Pectoris"
Thomas L. Kilgore, Jr., and James C. Griffin, Jr., Jackson

"Clinical Experience With the Fiberoptic Bronchoscope"
James C. Griffin, Jr., Thomas L. Kilgore, Jr., and J. Harvey Johnston, Jackson

Current G.U. Research

Gantanol® in animals
(sulfamethoxazole)



ntrol



12.5 mg sulfamethoxazole/kg of body weight



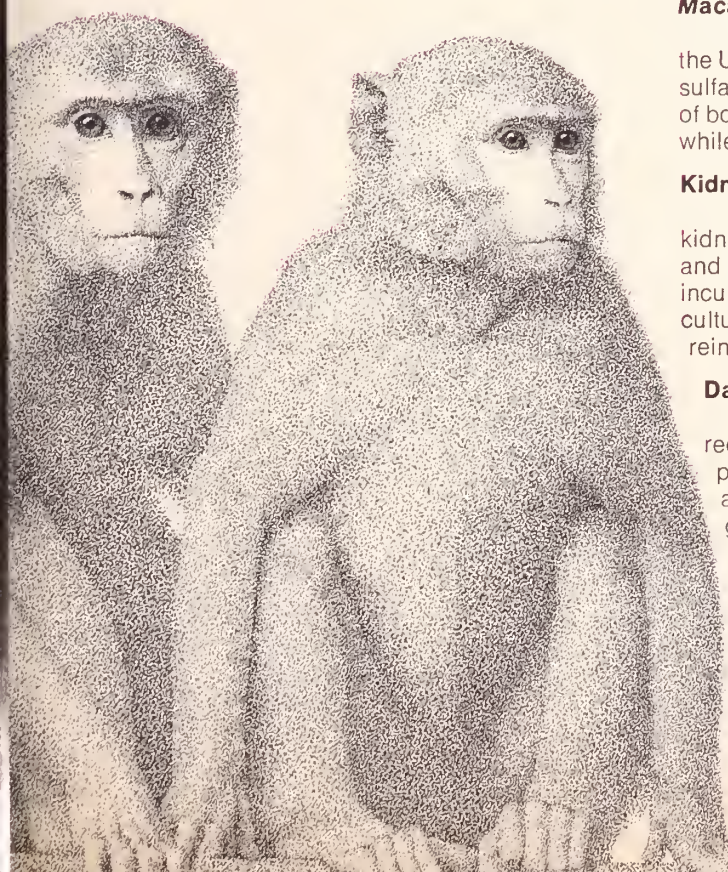
50 mg of sulfamethoxazole/kg of body weight



100 mg of sulfamethoxazole/kg of body weight

Tissue slice technique maps renal distribution in animal studies

Please note that while the method described may add to the knowledge of how antibacterial agents are distributed in the kidney of this animal, no conclusions can be drawn from this study relative to the drug's distribution, effect or use in humans, as it is not possible to extrapolate animal data to humans.



Gantanol® (sulfamethoxazole) administered to *Macaca speciosa* monkeys

Working with *Macaca speciosa* monkeys, researchers at the University of Arkansas Medical Center administered sulfamethoxazole at doses of 12.5 mg, 50 mg and 100 mg/kg of body weight. Each dosage level was given to three animals while three were left untreated as controls.*

Kidneys inoculated with *Staphylococcus aureus*

After 2½ hours, the 12 monkeys were sacrificed and their kidneys frozen with CO_2. Sagittal tissue slices were prepared and placed on blood agar bacteriological plates. They were incubated at 37°C. for 1½ hours. *Staphylococcus aureus* broth culture was then used to inoculate the tissue and slices were reincubated.*

Dark staining reveals heavy bacterial growth

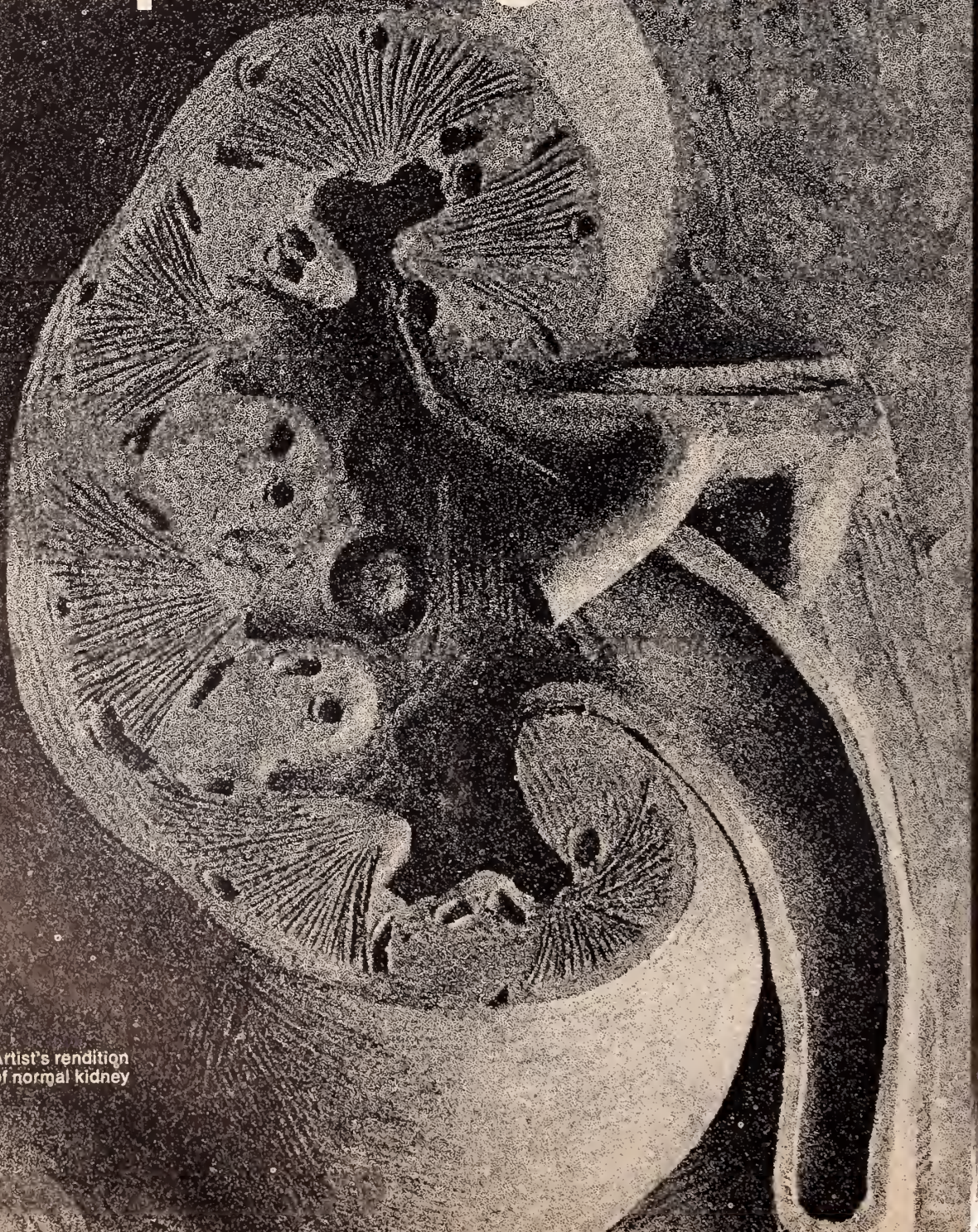
A solution of triphenyltetrazolium chloride, which turns a reddish purple in the presence of bacteria, was added to the plates after 6 hours. Renal slices from the untreated control animals consistently demonstrated heavy bacterial growth, as evidenced by dark staining.*

Distribution throughout *Macaca speciosa* renal parenchyma

At the dosage of 12.5 mg/kg of body weight, a diffuse stain pattern indicated partial inhibition of bacterial growth. Renal slices from monkeys given the 50 and 100 mg/kg doses showed no staining, indicating complete bacterial inhibition and *suggesting* antibacterial distribution throughout the parenchyma.*

*Mobley, J. E.; Redman, J. F., and Robbins, R. P.: *Surg. Gynec. Obstet.*, *131*:1122, 1970.

Gantanol® (sulfamethoxazole) in nonobstructed pyelonephritis due to susceptible organisms



Artist's rendition of normal kidney

stablishes antibacterial levels in blood nd urine in from 2 to 3 hours

from 2 to 3 hours of the initial 2-Gm adult dose, effective ntibacterial levels of Gantanol® (sulfamethoxazole) are chieved in both blood and urine. This prompt, early treatment acute nonobstructed pyelonephritis may help avert possible hronic sequelae.

ontrols primary bacterial offenders

ntibacterial Gantanol (sulfamethoxazole) controls susceptible *coli*, the most common cause of urinary tract infections. It is so effective against other susceptible gram-negative and gram-ositive urinary pathogens such as *Klebsiella-Aerobacter, Staph. ureus* and *Proteus mirabilis*.

lso effective in nonobstructed chronic nd recurrent urinary tract infections

is also common for the elderly and debilitated to develop hronic nonobstructed urinary tract infections, primarily pyelo-ephritis and cystitis. Such cases often respond satisfactorily to erapy with Gantanol.

.I.D./T.I.D. schedule gives ound-the-clock coverage

ubsequent 1-Gm doses can provide up to 12 hours of antibacte-al activity. The *b.i.d.* dosage is recommended for mild to oderate infections; the *t.i.d.* for the more severe u.t.i. Gantanol rovides coverage around the clock—coverage that is especially nportant during the hours of sleep, when urinary retention vors bacterial proliferation.

our option: tablets or suspension

antanol is available in two convenient dosage forms—tablets or pleasant-tasting suspension. It is generally well tolerated with lative freedom from complications. The usual precautions with ulfonamide therapy should be observed, including adequate fluid take, frequent c.b.c.'s and urinalyses with microscopic exam-ation. The most common side effects reported are nausea, omiting and diarrhea. (It should also be noted that the increasing equency of resistant organisms is a limitation of usefulness of ntibacterial agents, including sulfonamides, especially chronic or recurrent u.t.i.)

n nonobstructed pyelonephritis ue to susceptible organisms

Gantanol®
sulfamethoxazole)
Basic therapy

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies.

***Note:* Since *in vitro* sulfonamide sensitivity tests are not always reliable, carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent urinary tract infections.**

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows: *Adults*—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab or teasp.) *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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NEW LOWER PRIC

(TETRACYCLINE HCl, 500-mg capsules

GETS POINTS FOR LOW COST... SCORES HIGH IN CONVENIENCE

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"Experimental Medical Care Review Organization"
Mississippi State Medical Association

"Civilian Health and Medical Program of the Uniformed Services"
Mississippi State Medical Association

"Neonatal Abdominal Distress"
Richard C. Miller, Division of Pediatric Surgery, University Medical Center, Jackson

"Functions of a Comprehensive Rehabilitation Center"
Mississippi Methodist Rehabilitation Hospital and Center, Jackson

"Kidney Transplantation and Procurement Program for the State of Mississippi"
Department of Surgery, University Medical Center, Jackson

OLE MISS MEDICAL ALUMNI

University of Mississippi Medical Alumni, their ladies, and guests will meet on Monday, May 8, at the Sheraton-Biloxi. Alumni registration will be located adjacent to general registration in the second level lobby and will be open at 8:00 a.m. where tickets for the evening party will be available. A general business meeting will be conducted at 4:00 p.m. in the Boston Room (main lobby arcade). The cocktail party is in Gulf Rooms A, B, and C at 7:00 p.m., and the Seafood Jamboree dinner-dance will be in the Grand Ballroom East at 8:00 p.m. The program committee is Dr. Frank L. Schmidt of Pass Christian, chairman, Dr. Jerry R. Adkins of Biloxi, and Dr. David Clippinger of Gulfport. Officers are Drs. J. Dan Mitchell of Jackson, president; Dr. Bobby F. King of Iuka, president-elect; and Mr. Charles William Price of Jackson, secretary. Further details and tickets may be secured from Mr. Price at the Ole Miss Medical Alumni House, UMC Campus, Jackson 39216.

TENNESSEE MEDICAL ALUMNI

Medical alumni of the University of Tennessee will enjoy cocktails and dinner on Tuesday evening, May 9, in Gulf Rooms C and D at 6:00 p.m. Dr. Frederick E. Tatum of Hattiesburg is chairman, and Mr. June Montgomery, UT director of Alumni Affairs, will be present.

TULANE MEDICAL ALUMNI

Medical graduates of the Tulane University will be feted at an informal cocktail party on Tuesday evening, May 9, in the Empire Room at 5:30 p.m. Dr. M. E. Lapham, executive secretary of the association, and Mrs. Dorothy Kimbell, administrative assistant, are aiding in arrangments.

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1972 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies, equipment, and in providing varied services will present exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Only registered members and guests are admitted. The Technical Exhibit is located in the Grand Ballroom West.

EXHIBITORS	BOOTH
Abbott Laboratories, North Chicago, Ill.	31
American Family Life Insurance Co., Columbus, Ga.	22
Bristol Laboratories, Syracuse, N. Y.	18
Ciba Pharmaceutical Company, Atlanta, Ga.	5
Coca-Cola USA, Atlanta, Ga.	27
Econocopy of Mississippi, Inc., Jackson, Miss.	11, 12
Endo Laboratories, Garden City, N. Y.	9
Hill Crest Hospital, Birmingham, Ala.	13
Hoechst Pharmaceutical Company, Somerville, N. Y.	17
Lakeside Laboratories, Inc., Milwaukee, Wis.	6
Lanier Business Products, Jackson, Miss.	24
McNees Medical Supply Co., Jackson, Miss.	1
Mead Johnson Laboratories, Evansville, Ind.	30
Medical Incorporate Financial, Inc., Jackson, Miss.	23
Mississippi Hospital and Medical Service, Jackson, Miss.	7
William P. Poythress and Co., Richmond, Va.	16
A. H. Robins Company, Richmond, Va.	19
Sandoz Pharmaceuticals, Hanover, N. J.	14
Schering Laboratories, Kenilworth, N. J.	15
E. R. Squibb and Sons, Princeton, N. J.	29
Stuart Pharmaceuticals, Pasadena, Calif.	2
The St. Paul Companies, St. Paul, Minn.	26
Travelers Insurance Co., Jackson, Miss.	20
The Upjohn Company, Kalamazoo, Mich.	25
U. S. V. Pharmaceutical, Tuckahoe, N. Y.	28
Winthrop Laboratories, N. Y., N. Y.	8

SCIENTIFIC GRANTS

Geigy Pharmaceuticals, Ardsley, N. Y.
Eli Lilly and Company, Indianapolis, Ind.
A. H. Robins Company, Richmond, Va.

REGISTRATION FOR EXHIBIT PRIZES

Visit the Technical Exhibits often and qualify for the drawing of attractive prizes. Obtain necessary initials as you visit each booth. Deposit cards at Registration not later than 12:30 p.m., Thursday, May 11.

PLENARY SESSION



Tuesday, May 9, 1972
Grand Ballroom East
Beginning at 9:00 a.m.

Raymond S. Martin, Jr., Jackson
Presiding

Millard S. Costilow, North Carrollton
Moderator

EXPERIMENTAL MEDICAL CARE REVIEW ORGANIZATION
James Z. Appel, Lancaster, Pa.

MISSISSIPPI FOUNDATION FOR MEDICAL CARE
J. T. Davis, Corinth

PANEL DISCUSSION
James Z. Appel, Lancaster, Penn.
J. T. Davis, Corinth
Millard S. Costilow, North Carrollton
Hilton C. Bowers, Jackson

SCIENTIFIC PROGRAM

Tuesday, May 9, 1972
Grand Ballroom East
Combined meeting, Surgery and Ob-Gyn Sections, beginning at 2:00 p.m.

William R. Raulston, Hattiesburg
Chairman, Section on Ob-Gyn

Warren C. Plauche, Biloxi
Secretary

Moderator: Dr. Raulston



DR. RAULSTON

THE AGGRESSIVE SURGICAL MANAGEMENT OF THE PELVIC ABSCESS
Alan L. Kaplan, Houston, Tex.

INFLAMMATORY DISEASE OF THE COLON TREATED BY ILEOSTOMIES; QUALITY OF SURVIVAL OF PATIENTS: 497 CASES
Oliver H. Beahrs, Rochester, Minn.

SCIENTIFIC PROGRAM

Tuesday, May 9, 1972
Grand Ballroom East
Combined meeting, Surgery and Ob-Gyn Sections, beginning at 2:00 p.m.

William L. Weems, Jackson
Chairman, Section on Surgery

Benton M. Hilbun, Tupelo
Secretary

Moderator: Dr. Weems



DR. WEEMS

LAPAROSCOPY AND TUBAL FULGURATION
George R. Huggins, Jackson

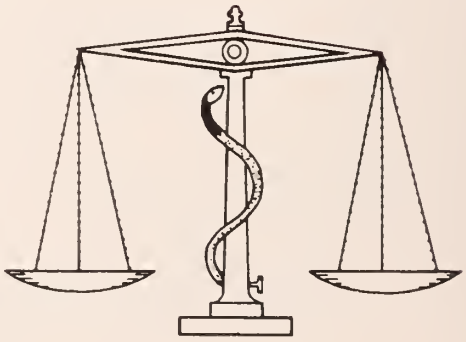
SURGICAL MANAGEMENT OF PULMONARY EMBOLISM
William H. Moretz, Augusta, Ga.

THE PILL AND THE BREAST
James P. Spell, Jackson

PLENARY SESSION

Wednesday, May 10, 1972
Grand Ballroom East
Beginning at 9:00 a.m.

Myron W. Lockey, Jackson
Presiding



PROFESSIONAL CORPORATIONS
Arnold J. Streich, Chicago

PANEL DISCUSSION
George D. Purvis, Jr., Jackson
Ellis M. Moffitt, Jackson
R. L. Yelverton, Jackson

PROFESSIONAL LIABILITY
Bernard D. Hirsh, Chicago

PANEL DISCUSSION
J. D. "Pete" Holland, Jackson
C. D. Taylor, Jr., Pass Christian
John B. Howell, Jr., Canton

SCIENTIFIC PROGRAM

Wednesday, May 10, 1972
Grand Ballroom East
Combined meeting, Medicine, Preventive Medicine and General Practice Sections, beginning at 1:30 p.m.

James C. Totten, Jr., Pascagoula
Chairman, Section on Preventive Medicine

Frank M. Wiygul, Jr., Jackson
Secretary

Moderator: Dr. Totten



DR. TOTTEN

THE VENEREAL DISEASES AND THE PRIVATE PHYSICIAN
William L. Holder, Jackson

SCIENTIFIC PROGRAM

Wednesday, May 10, 1972
Grand Ballroom East
Combined meeting, Medicine, General Practice and Preventive Medicine Sections, beginning at 1:30 p.m.

David M. Owen, Hattiesburg
Chairman, Section on Medicine

S. H. McDonnieal, Jr., Jackson
Secretary

Moderator: Dr. Owen



DR. OWEN

SEARLE MEDIDATA PRESENTATION ON AMHT
Herbert A. Haessler, Lincoln, Mass.

THE TOLBUTAMIDE CONTROVERSY
James M. Moss, Alexandria, Va.

SCIENTIFIC PROGRAM

Wednesday, May 10, 1972
Grand Ballroom East
Combined meeting with Medicine, General Practice and Preventive Medicine Sections, beginning at 1:30 p.m.

Eugene F. Webb, Itta Bena
Chairman, Section on General Practice

W. Boyce White, Laurel
Secretary

Moderator: Dr. Webb



DR. WEBB

CURRENT CONCEPTS IN THE DIAGNOSIS AND TREATMENT OF ISCHEMIC HEART DISEASE
H. Davis Dear, Jackson

SCIENTIFIC PROGRAM

Thursday, May 11, 1972
Grand Ballroom East
Combined meeting, Pediatrics and EENT Sections, beginning at 9:30 a.m.



DR. LEHMANN

Myron W. Lockey, Jackson
Chairman, Section on EENT

James K. Williams, Jr.,
Pascagoula, Secretary

Louis C. Lehman, Natchez
Chairman, Section on Pediatrics

John R. Jackson, Jr., Hattiesburg
Secretary



DR. LOCKEY

LEARNING DISORDERS AS RELATED TO EENT PROBLEMS

Divisions of Ophthalmology and Otolaryngology, University Medical Center, Jackson

Ojus Malphurs, Jr., Director, Communications Disorders Laboratory, University Medical Center, Jackson

VISITING ESSAYISTS



DR. HALL

WESLEY W. HALL, M.D., Reno, Nev. President, American Medical Association. Senior consultant in surgery, orthopedics and gynecology, Washoe Medical Center & St. Mary's Hospital, Reno. Medical Education, Tulane University, 1930. Diplomate, American Board of Surgery.



DR. KAPLAN

ALAN L. KAPLAN, M.D., Houston, Tex. Associate Professor of Obstetrics and Gynecology and Assistant Professor of Radiology, Baylor University College of Medicine. Medical Education, Columbia University, 1955. Diplomate, American Board of Obstetrics and Gynecology.



DR. BEAHRS

OLIVER H. BEAHRS, M.D., Rochester, Minn. On staff of Mayo Clinic and Clinical Professor of Surgery, University of Minnesota. Medical Education, Northwestern University, 1942. Diplomate, American Board of Surgery.



DR. MORETZ

WILLIAM H. MORETZ, M.D., Augusta, Ga. Professor and Chairman, Department of Surgery, Medical College of Georgia. Medical Education, Harvard University, 1939. Diplomate, American Board of Surgery.

JAMES M. MOSS, M.D., Alexandria, Va. Clinical Professor of Medicine, Georgetown University, and director of the Diabetic Clinic. Medical Education, University of Virginia, 1941. Diplomate, American Board of Internal Medicine.



DR. MOSS



DR. APPEL

JAMES Z. APPEL, M.D., Lancaster, Pa. Consultant, National Center for Health Services Research and Development. Medical Education, University of Pennsylvania, 1932.

Bernard D. Hirsh, LL.B., Chicago, Ill. General Counsel, American Medical Association.



Mr. Hirsh



Mr. Streich

Arnold J. Streich, LL.B., Chicago, Ill. Director, Corporate Law Department, American Medical Association.

J. D. "Pete" Holland, Jackson, General Agent, The St. Paul Insurance Companies. Field Supervisor for North Mississippi territory, and Liaison Representative for the MSMA medical liability program.



Mr. Holland



Mr. Holder

William L. Holder, Jackson. Senior Public Health Advisor in Venereal Disease Control, Miss. State Board of Health. Education, University of North Carolina, 1960.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

49th Annual Session
The Sheraton-Biloxi
May 8-9, 1972



MRS. ROSS

OFFICERS

MRS. T. E. ROSS, III
Hattiesburg, President

MRS. CLARENCE H. WEBB, JR.,
Jackson, President-elect

MRS. JOE D. HERRINGTON
Natchez, Secretary

MRS. HENRY WEBB
Jackson, Treasurer



MRS. WEBB

ANNUAL SESSION CHAIRMEN

Mrs. Robert A. Little
Gulfport
General Chairman

Mrs. Steve Sekul
Biloxi
Registration

Mrs. T. A. Baines
Jackson
Hospitality

Mrs. Patrick Pierce
Gulfport
Luncheon

AUXILIARY

Monday, May 8, 1972

1:30 p.m. Finance Committee Meeting, Directors Room

3:00 p.m. Registration

3:30 p.m. Preconvention Executive Board Meeting, Directors Room

Tuesday, May 9, 1972

7:30 a.m. Continental Breakfast, Empire Room

8:30 a.m. Registration

8:30 a.m. General Session, Top of the Sheraton
Invocation
Welcome
Response
Introductions
Greetings
Arthur E. Brown, M.D., Columbus
President, MSMA
C. R. Jenkins, M.D., Laurel
President-elect, MSMA
Mrs. Raymond E. Jones, Louisville, Ky.
Southern Medical Auxiliary President
Memorial Service
Mrs. James Stingily, Hazlehurst
Minutes
Roll Call
Business
President's Report
Nominating Committee Report
Election of Officers
Appointment of Delegates to AMA Convention
Courtesy Resolutions
Adjournment

1:00 p.m. Luncheon, Top of the Sheraton
Invocation
Introduction of Guests
Mrs. Amos Johnson, North Carolina
Southern Regional Vice President AMA Woman's Auxiliary
Installation of Officers
Mrs. Amos Johnson
Presentation of Gavel and Pin
Response of Incoming President
Presentation of Past President's Pin
AMA-ERF Awards
Announcements
Adjournment

3:30 p.m. Postconvention Board of Directors and Unit Presidents' Workshop, Jackson Room

Wednesday, May 10, 1972

8:30 a.m. Past President's Breakfast, Jackson Room

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

The Sheraton-Biloxi
May 7-8, 1972
THAD RODDA, Clarksdale, President
ROLAND F. SAMSON, Jackson, Secretary

Sunday, May 7, 1972

2:00 p.m. Business Meeting, Empire Room

Monday, May 8, 1972

9:00 a.m. Scientific Session, Gulf Room C
12:00 noon Adjournment

AMERICAN COLLEGE OF SURGEONS, MISSISSIPPI CHAPTER

The Sheraton-Biloxi
Tuesday, May 9, 1972

W. COUPERY SHANDS, Jackson, President

RAYMOND S. MARTIN, JR., Jackson, President-elect

ALBERT L. MEENA, Jackson, Secretary-Treasurer

11:00 a.m. Business Meeting, Gulf Room C, Second Level
12:00 noon Luncheon, Gulf Room B
12:45 p.m. Scientific Program
Open to all members of MSMA
RADICAL NECK DISSECTION
Oliver H. Beahrs, Rochester, Minn.
WOUND DEHISCENCE—CAUSE AND PREVENTION
William H. Moretz, Augusta, Ga.

MISSISSIPPI SOCIETY OF ANESTHESIOLOGISTS

The Mississippi Society of Anesthesiologists will meet at the Country Club of Jackson (Jackson, Miss.) on Sunday evening, May 7, at 7:00 p.m. Guest speaker will be Dr. M. T. Jenkins, M. C. Dermott Professor and Chairman, Department of Anesthesiology, Parkland Memorial Hospital, Dallas. Dr. Jenkins will give two presentations: "Lessons from Nature on Fluid Balance" and "The State of the Society of Anesthesiologists." Society officers are Drs. Barry B. Aden of Jackson, president; Robert L. Thompson of Pascagoula, president-elect; and Carlos S. Patino, secretary.

MISSISSIPPI RADIOLOGICAL SOCIETY

The Mississippi Radiological Society will host a fellowship hour and scientific speaker on Sunday, May 7, in the Boston Room of the Sheraton-Biloxi. Dr. J. V. Ferguson of Greenwood is society president and Dr. Dan Keel of Brookhaven is program chairman.



CALORIES / 1 Cup Prepared Soup*

Beef Broth	25	Vegetable	77
Consomme	33	Tomato	79
Chicken with Rice	49	Cream of Asparagus	80
Chicken Gumbo	55	Cream of Chicken	87
Chicken Noodle	62	Beef	99
Chicken Vegetable	68	Cream of Potato	105
Turkey Noodle	72	Cream of Mushroom	131
Vegetable Beef	75	Green Pea	131

In planning high or low calorie diets, Campbell's more than 50 different soups offer you a wide choice. And, most of Campbell's Soups contain a wide variety of ingredients that can serve as supplementary sources of many essential nutrients.

* From "Nutritive Composition of Campbell's Products" which gives values of important nutritive constituents of all Campbell's Products. For your copy, write to Campbell Soup Company, Dept. 536, Camden, New Jersey 08101.

There's a soup for almost every patient and diet ..for every meal and, it's made by Campbell

the 3 phases of Eve



All women are not equal in their endogenous hormonal output. And, while all oral contraceptives are fundamentally effective, they exhibit **differences in their activity levels and estrogen-progestogen ratios that affect different women differently**—in both short and long-term use. Some brands may be insufficient for the woman's needs or else may exceed them.

Searle offers a family of O.C. products that covers the range of women's needs to help you provide the right pill for the right woman at the right time.

the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slight progestogen dominance. It has an excellent record of patient acceptance.

Ovulen®

Each white tablet contains ethynodiol diacetate 1 mg mestranol 0.1 mg

References **1.** Editorial: Oral Contraceptives: Which Pill for Which Patient? Patient Care 3:90-115 (Feb 15) 1969 and 4:135-145 (June 15) 1970. **2.** Greenblatt, R.B.: Progestational Agents in Clinical Practice. Med. Sci. 18:37-49 (May) 1965. **3.** Kistner, R.W.: Gynecology: Principles and Practice, ed. 2. Chicago, Year Book Medical Publishers, 1971. **4.** Kistner, R.W.: The Pill: Facts and Fallacies About Today's Oral Contraceptives. New York, Delacorte Press, 1968. **5.** Nelson, J.H.: Clinical Evaluation of Side Effects of Current Oral Contraceptives. J. Reprod. Med. 6:150-155, Feb. 1971. **6.** Orr, G.W.: Oral Progestational Agents: Therapy and Complications. S. Dakota J. Med. 22:15-17, Jan. 1969.

SEARLE

For brief summary of prescribing information see following page.



the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.
Each pink tablet in Ovulen-28® and Demulen® 28 is a placebo, containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.

the Enovid-E phase

Some women* who secrete **less estrogen** than most do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutism, masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome
early-cycle bleeding
scanty menses
intermittent depression
increased appetite
steady weight gain
vaginal candidiasis

Enovid-E not only provides increased estrogenic activity with low progestogen activity, but also contains the only progestogen that is not antiestrogenic. Therefore it offers less risk of high-dose progestogen side effects.

Enovid-E®

Each tablet contains norethynodrel 2.5 mg./mestranol 0.1 mg.

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

a family of O.C. products

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions – Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note – Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication – Ovulen and Demulen are indicated for oral contraception.

Contraindications – Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings – The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions – The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives – A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E., Masi, A. T., Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives. An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

SEARLE Products of SEARLE & CO.
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Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions – Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication – Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

SEARLE **Enovid-E®**

brand of norethynodrel with mestranol

Product of G. D. Searle & Co.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

MISSISSIPPI COMMISSION ON HOSPITAL CARE

The Mississippi Commission on Hospital Care will conduct a meeting at the Sheraton-Biloxi at 2:00 p.m. in the Empire Room on Monday, May 8. President is Dr. W. B. Winstead of Pascagoula; vice president is Dr. H. J. Blakeney of Amory; and secretary is Mr. Walter B. Crook, Jr., of Ruleville.

MISSISSIPPI ORTHOPAEDIC SOCIETY

The Mississippi Orthopaedic Society will hold a luncheon at 12:00 noon in Gulf Room D, Sheraton-Biloxi, on Monday, May 8. Officers are Drs. Louis A. Farber of Jackson, president; and Clyde X. Copeland of Jackson, secretary-treasurer.

MISSISSIPPI UROLOGICAL SOCIETY

Members of the Mississippi Urological Society will meet Monday, May 8, in the Boston Room of the Sheraton-Biloxi, for a luncheon at 12:00 noon, followed by a business meeting. Society officers are Drs. Charles D. Scruggs of Jackson, president; M. E. Hinman of Vicksburg, president-elect, and program chairman; and W. H. Merrell, Jr., of Jackson, secretary-treasurer.

REFERENCE COMMITTEE BREAKFAST

Members of all Reference Committees of the House of Delegates will meet for breakfast on Monday morning, May 8, in Gulf Room D at 7:00 a.m. Hosts are Drs. William E. Lotterhos of Jackson, speaker, and John B. Howell, Jr., of Canton, vice speaker. At this important meeting, committee members will be instructed in their duties and conduct of hearings later in the day.

A SHORT COURSE IN PRACTICAL TONOMETRY (GLAUCOMA) FOR NON-OPHTHALMOLOGISTS

The Mississippi EENT Association and the Mississippi Society for the Prevention of Blindness will conduct a training course in indications and mechanics of tonometry including demonstrations and actual participation. Approval for one hour's credit from the Mississippi Academy of General Practice has been granted. The course will be offered in Gulf Room C at 4:30 p.m. on Tuesday, May 9; 11 a.m. on Wednesday, May 10; and 1:30 p.m. on Thursday, May 11.

FIFTY YEAR CLUB

The Board of Trustees, sponsors of the association's Fifty Year Club, will honor the half-century plus members at a special luncheon on Tuesday, May 9, in the Boston Room at 12:00 noon. Dr. J. T. Davis of Corinth, chairman of the Board of Trustees, will preside. Mrs. Barbara Shelton, director of the Department of Administrative Services at the executive office, is club secretary.

FLYING PHYSICIANS ASSOCIATION, MISSISSIPPI CHAPTER

The Mississippi chapter of the Flying Physicians Association, Inc. will give a cocktail party and buffet dinner at the Sheraton-Biloxi in Gulf Rooms A and B on Tuesday evening, May 9. Special guest speaker will be Dr. Francis X. Sommer of Barbourville, Ky., national FPA president, who will give a slide presentation of his around the world flight in a single engine Bonanza, entitled "Around the World on the Lindbergh Trail."

MISSISSIPPI OB-GYN SOCIETY

The Mississippi Ob-Gyn Society will conduct a cocktail party and luncheon on Tuesday, May 9, 1972, in Gulf Room D beginning at 11:00 a.m. Officers of the society are Drs. Charles Head of Jackson, president; George Ball of Jackson, president-elect; Calvin T. Hull, secretary-treasurer.

MSMA PAST PRESIDENTS' BREAKFAST

Past presidents of the Mississippi State Medical Association will enjoy a breakfast meeting on Wednesday morning, May 10, in the Boston Room at 7:30 a.m. Dr. Paul B. Brumby of Lexington is host.

AUXILIARY PAST PRESIDENTS' BREAKFAST

Past presidents of the Woman's Auxiliary to the Mississippi State Medical Association will enjoy a breakfast meeting on Wednesday morning, May 10, in the Biloxi Room at 8:30 a.m. Mrs. Curtis Caine of Jackson is hostess.

MISSISSIPPI SOCIETY OF INTERNAL MEDICINE

A luncheon meeting of the Mississippi Society of Internal Medicine will be conducted on Wednesday, May 10, in the Boston Room at 12:00 noon. There will be a brief business session. Officers of the society are Drs. G. S. Barnes of Columbus, president; John R. Shell of Vicksburg, president-elect and S. H. McDonnieal, Jr., of Jackson, secretary.

MISSISSIPPI ACADEMY OF GENERAL PRACTICE

The Mississippi Academy of General Practice will sponsor a luncheon at 12:00 noon on Wednesday, May 10, in the Top of the Sheraton. Dr. W. L. Jaquith of Whitfield will speak on the drug abuse problem in the state. Officers of the Mississippi Academy are Drs. James O. Stephens of Magee, president; Eugene Webb of Itta Bena, president-elect; Herbert Hicks of Natchez, vice-president; and William B. Hunt of Grenada, secretary-treasurer.

GOLF TOURNAMENT

The annual association golf tournament will be conducted at the Sunkist Country Club on Wednesday, May 10, Dr. A. V. Hays, Gulfport, chairman. The entrance fee will include green fees and should be paid to Pro Frank Stiedle who will conduct the tournament. Handicaps are not needed, and Tuesday rounds are acceptable. Prizes and awards will be given at 5:00 p.m. Wednesday in the lounge. For further information, communicate with Dr. Hays at the EENT Hospital, 13th and 31st Ave., Gulfport 39501.

ASSOCIATION PARTY

Members of the Mississippi State Medical Association, their ladies, and guests will enjoy a cocktail party on Wednesday evening, May 10, in the Grand Ballroom East at 6:00 p.m. There is no dinner or program, just good fellowship. Tickets will be available at general registration.

MISSISSIPPI EENT ASSOCIATION

The Mississippi Eye, Ear, Nose and Throat Association will conduct a luncheon and business meeting on Thursday, May 11, in Gulf Room B at 12:00 noon. Officers of the association are Drs. James K. Williams of Pascagoula, president; John E. Green of Hattiesburg, president-elect; and Ben McCarty of Jackson, secretary.

MISSISSIPPI FOUNDATION FOR MEDICAL CARE

The Mississippi Foundation for Medical Care will hold its first meeting on Thursday afternoon, May 11, at the Sheraton-Biloxi. All participating and administrative members are urged to attend.

LOUISIANA-MISSISSIPPI OPHTHALMOLOGICAL AND OTOLARYNGOLOGICAL SOCIETY

The Broadwater Beach Hotel, Biloxi
May 11-13, 1972

PAUL L. MARKS, Baton Rouge, President
RALPH SNEED, Jackson, President-elect
ARTHUR V. HAYS, Gulfport, Secretary-Treasurer

Thursday, May 11, 1972

9:00 a.m. Section on Eye, Ear, Nose, and Throat and Pediatrics, Mississippi State Medical Association, Grand Ballroom East, Sheraton-Biloxi

Friday and Saturday, May 12-13, 1972

OPHTHALMOLOGY

Frank B. Walsh, Baltimore, Md.
J. Graham Dobbie, Chicago

OTOLARYNGOLOGY

Slaughter Fitzhugh, Charlottesville, Va.
Frank Lathrop, Pittsford, Vt.

RECREATION

The society will sponsor golf and tennis tournaments and a skeet shoot. There will be an art show for the ladies.

SEAFOOD JAMBOREE

Friday evening, May 12, Fellows, ladies, and guests may enjoy a Famous Biloxi Seafood Jamboree with music by the Dixieland Band.

DINNER DANCE

Saturday evening highlight is a dinner dance with music by Rene Louappre.

REGISTRATION FEES

Fees for registration are $50.00 for guest physicians and $25.00 for residents. This includes tickets for two luncheons with guest speakers, Friday night seafood jamboree for two and Saturday night dinner dance for two. For additional information, communicate with Dr. Arthur V. Hays, Secretary, 3017 13th St., Gulfport, Miss. 39501.

140/90 is normal blood pressure...or is it?

An extensive study based on nearly 4 million life insurance policies suggests that a blood pressure reading of 140/90 requires close medical supervision.

Study Findings. Twelve years ago the Society of Actuaries reported on an extensive study based on the lives and deaths represented by almost 4 million life insurance policies. From this vast survey—"The Build and Blood Pressure Study"[1]—insurance experts concluded that:

- Blood pressure above 140/90 is accompanied by increased morbidity and requires close medical attention.
- Even small increments in either systolic or diastolic blood pressure progressively and steeply shorten life expectancy.

Other Studies. Studies conducted with large numbers of patients since that time have echoed the above findings. Two studies published in 1970—the VA Cooperative Study Group on "Effects of Treatment on Morbidity in Hypertension"[2] and the "Framingham Study"[3]—suggest that treatment of even mild hypertension may, over time, offer significant benefits to the patient.

Another Point of View. Although a growing body of studies suggests that treatment of mild hypertension is warranted, medical opinion is not unanimous. Some clinicians recommend that drug treatment for mild hypertension be reserved for patients with additional risk factors such as smoking, high cholesterol levels, heart or kidney involvement, or a family history of vascular disease. Dr. Walter M. Kirkendall stated this position in his recent paper "What's With Hypertension These Days?"[4] Discussing the management of hypertension in patients with a sustained diastolic pressure up to 100 mm Hg, he said: "Generally, I do not recommend antihypertensive therapy unless patient's blood pressure approaches the upper limit for the group and a number of adverse factors exist, such as male sex, family history of vascular disease, youth, evidence of heart or kidney involvement."



Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

MSD
MERCK
SHARP
DOHME

25- and 50-mg tablets

HydroDIURIL®
(Hydrochlorothiazide|MSD)

Therapy to Start With

For a brief summary of prescribing information, please see next page.

1. Society of Actuaries, *The Build and Blood Pressure Study*, 1959.
2. Veterans Administration Cooperative Study Group on Antihypertensive Agents, "Effects of Treatment on Morbidity in Hypertension," JAMA *213*:1143-1152, Aug. 17, 1970
3. Kannel, William B., *et al*: "Epidemiologic Assessment of the Role of Blood Pressure in Stroke—The Framingham Study," JAMA *214*:301-310, Oct. 12, 1970.
4. Kirkendall, Walter M.: "What's With Hypertension These Days?" Consultant, Jan. 1971

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

CONTRAINDICATIONS: Anuria; increasing azotemia and oliguria during treatment of severe progressive renal disease. Known sensitivity to this compound. Nursing mothers; if use of drug is deemed essential, patient should stop nursing.

WARNINGS: May precipitate or increase azotemia. Use special caution in impaired renal function to avoid cumulative or toxic effects. Minor alterations of fluid and electrolyte balance may precipitate coma in hepatic cirrhosis.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during initial therapy. Dosage of other antihypertensive agents, especially ganglion blockers, must be reduced by at least 50% because HydroDIURIL potentiates their action.

Stenosis and ulceration of the small bowel causing obstruction, hemorrhage, and perforation have been reported with the use of enteric-coated potassium tablets, either alone or with nonenteric-coated thiazides. Surgery was frequently required, and deaths have occurred. Such formulations should be used only when indicated and when dietary supplementation is impractical. Discontinue immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occurs.

Thiazides cross placenta and appear in cord blood. In women of childbearing age, potential benefits must be weighed against possible hazards to fetus, such as fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

PRECAUTIONS: Check for signs of fluid and electrolyte imbalance, particularly if vomiting is excessive or patient is receiving parenteral fluids. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances. Hypokalemia may develop (especially with brisk diuresis) in severe cirrhosis; with concomitant steroid or ACTH therapy; or with inadequate electrolyte intake. Digitalis therapy may exaggerate metabolic effects of hypokalemia, especially with reference to myocardial activity. Hypokalemia may be avoided o treated by use of potassium chloride or giving food with a high potassium content. Similarly, any chlorid deficit may be corrected by use of ammonium chlorid (except in patients with hepatic disease) and largel prevented by a near normal salt intake. Hypochloremi alkalosis occurs infrequently and is rarely severe. I severely edematous patients with congestive failure o renal disease, a low salt syndrome may occur if dietar salt is unduly restricted, especially during hot weathe

Thiazides may increase responsiveness to tubocu rarine. The antihypertensive effect of the drug may b enhanced in the postsympathectomy patient. Arteria responsiveness to norepinephrine is decreased, neces sitating care in surgical patients. Discontinue drug 4 hours before elective surgery. Orthostatic hypotensio may occur and may be potentiated by alcohol, barbit urates, or narcotics.

Pathological changes in the parathyroid glands wit hypercalcemia and hypophosphatemia have been see in a few patients on prolonged thiazide therapy. Th effect of discontinuing thiazide therapy on serum cal cium and phosphorus levels may be helpful in assess ing the need for parathyroid surgery in such patient Parathyroidectomy has elicited subjective clinical im provement in most patients, but has no effect o hypertension. Thiazide therapy may be resumed afte surgery.

Use cautiously in hyperuricemic or gouty patients gout may be precipitated. May affect insulin require ments in diabetics; may induce hyperglycemia an glycosuria in latent diabetics.

ADVERSE REACTIONS: Rare reactions includ thrombocytopenia, leukopenia, agranulocytosis, aplas tic anemia, cholestasis, and pericholangiolitic hepatitis Nausea, vomiting, diarrhea, dizziness, vertigo, pares thesias, transient blurred vision, sialadenitis, purpura rash, urticaria, photosensitivity, or other hypersensi tivity reactions may occur. Cutaneous vasculitis pre cipitated by thiazide diuretics has been reported i elderly patients on repeated and continuing exposur to several drugs. Scattered reports have linke thiazides to pancreatitis, xanthopsia, neonatal throm bocytopenia, and neonatal jaundice. When adverse reactions are moderate or severe, the dosage o thiazides should be reduced or therapy withdrawn

For more detailed information, consult your MSD Representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP & DOHME

POSTGRADUATE COURSE IN OBSTETRICS

The Sheraton-Biloxi, Gulf Rooms A and B
May 6-7, 1972, 9:00 a.m.-5:00 p.m.

DONALD M. SHERLINE, Jackson, Course Coordinator

FACULTY

Donald M. Sherline, associate professor and director of obstetrics, University Medical Center, Jackson
Gary Wood, instructor in obstetrics and gynecology, University Medical Center, Jackson, and fellow in reproductive physiology, University of Pennsylvania School of Medicine
Preston V. Dilts, Jr., associate professor of obstetrics and gynecology, University of Kentucky School of Medicine, Lexington

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Saturday, May 6

9 a.m.-12 noon—MEDICAL COMPLICATIONS
ANEMIA DURING PREGNANCY
Dr. Wood
THYROID DISEASE IN PREGNANCY
Dr. Dilts
CARDIOVASCULAR DISEASE IN PREGNANCY
Dr. Sherline

2 p.m.-5 p.m.—ANTEPARTUM COMPLICATIONS
RUBELLA
Dr. Wood
HYPERTENSIVE DISORDERS OF PREGNANCY
Dr. Dilts
INTRA-UTERINE GROWTH RETARDATION
Dr. Sherline

Sunday, May 7

9 a.m.-12 noon—INTRA-PARTUM COMPLICATIONS
DYSFUNCTIONAL LABOR
Dr. Sherline
PELVIMETRY
Dr. Wood
INDICATIONS FOR CESAREAN SECTION
Dr. Dilts

2 p.m.-5 p.m.—POSTPARTUM AND FAMILY PLANNING
POSTPARTUM HEMORRHAGE
Dr. Sherline
LACTATION AND INHIBITION OF LACTATION
Dr. Wood
FAMILY PLANNING
Panel discussion

REGISTRATION AND FEES

There will be no registration fee and the course is limited to 25 participants. The course is sponsored by the Maternal and Child Health Service (HSMHA-HEW) through a grant to the American College of Obstetricians and Gynecologists.

CREDIT

12 hours of credit has been requested from the American Academy of Family Physicians.

Date

I wish to enroll in the Postgraduate Course in Obstetrics May 6-7 at the Sheraton-Biloxi.

Signature

Printed Name

Address

Return to: Postgraduate Course
Mississippi State Medical Association
735 Riverside Drive
Jackson, Mississippi 39216

Handbook of the House of Delegates

Mississippi State Medical Association
104th Annual Session, Biloxi
May 8-11, 1972

SUPPLEMENTAL REPORT A
OF THE SECRETARY-TREASURER

Vacancies in Elected Offices. Effective May 11, 1972, there will occur 24 vacancies in elected offices in the association by reason of expiration of prescribed terms of service. In accordance with the By-Laws, the Nominating Committee will be asked to deliberate, consult with colleagues, and make nominations to the House of Delegates for consideration and voting to elect successors or to re-elect incumbents.

Eligibility. To be nominated for office in the association, a nominee must have been a member for two years, be in present good standing as a member, and must have attended two of the past three annual sessions, and the present annual session may be counted as one of these two. A member may not serve more than three consecutive terms as a member of the Board of Trustees or a council. Incumbents ineligible for re-election for this reason are indicated in the listing of offices to be filled.

Vacancies for Nomination. Following is the listing of vacancies which will occur during the 104th Annual Session as well as requirements for nominations and identity of incumbents:

President-elect

Nominate three, no two of whom may be from the same county, elect one.

Vice Presidents

Nominate three for the Northern Area, three for the Mid-State Area, and three for the Southern Area. Elect one for each area.

Delegate to AMA

Term Jan. 1, 1973-Dec. 31, 1974. Nominate two, elect one. Incumbent: C. D. Taylor, Jr., Pass Christian.

HANDBOOK INFORMATION

The Speaker and Vice Speaker of the House of Delegates herewith present for the information of all members those reports and resolutions as have been received for publication in advance of the 104th Annual Session. It is the intent of this advance publication to inform the membership and to afford all concerned the opportunity to confer with delegates over any aspect of the reports and resolutions.

No report or resolution herein becomes official or a statement of policy until formally presented to the House of Delegates and acted upon at the annual session.

WILLIAM E. LOTTERHOS
SPEAKER

JOHN B. HOWELL, JR.
VICE SPEAKER

Alternate Delegate to AMA

Term Jan. 1, 1973-Dec. 31, 1974. Nominate two, elect one. Incumbent: Stanley A. Hill, Corinth.

Editor

Term 1972-75. Nominate three, elect one. Incumbent: W. Moncure Dabney, Crystal Springs.

Associate Editor

Term 1972-74. Nominate two, elect one. Incumbent: George H. Martin, Vicksburg.

Board of Trustees, Districts 7, 8, and 9

Terms 1972-75. Nominate two for each district, elect one for each district. Incumbents: W. E. Moak, Richton, District 7, who is not eligible for re-election; Everett Crawford, Tylertown, District 8; and James T. Thompson, Moss Point, District 9.

Council on Budget and Finance

Terms 1972-75. Nominate two for each post, elect one for each post, two vacancies. Incumbents: George D. Purvis, Jackson, who is not eligible for re-election, and Jack A. Atkinson, Brookhaven.

Council on Constitution and By-Laws

Term 1972-75. Nominate two, elect one. Incumbent: Tom H. Mitchell, Vicksburg.

Judicial Council, Districts 4, 5, and 6

Terms 1972-75. Nominate two for each district, elect one for each district. Incumbents: Arthur A. Derrick, Jr., Durant, District 4; William B. Wiener, Jackson, District 5; and Charles M. Moore, Philadelphia, District 6.

Council on Legislation, Districts 7, 8, and 9

Terms 1972-75. Nominate two for each district, elect one for each district. Incumbents: A. T. Tatum, Petal, District 7; Everett Crawford, Tylertown, District 8; and C. D. Taylor, Jr., Pass Christian, District 9.

Council on Medical Education

Term 1972-75. Nominate two, elect one. Incumbent: Dennis E. Ward, Corinth.

Council on Medical Service, Districts 1, 2, and 3

Terms 1972-75. Nominate two for each district, elect one for each district. Incumbents: John F. Lucas, Jr., Greenwood, District 1; James O. Gilmore, Oxford, District 2; and Jack A. Stokes, Pontotoc, District 3.

Mississippi State Board of Health

No terms among the eight physician-members of the State Board of Health expire in 1972, and no nominations to the Governor will be necessary.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

103rd Annual Session. At the 103rd Annual Session in 1971, the House of Delegates approved one amendment to the By-Laws of the association:

Acting on Resolution No. 15, subject: Conduct of the House of Delegates, introduced by Dr. Howard A. Nelson of Greenwood, at the 102nd Annual Session in 1970, the House of Delegates amended Section 4, Chapter V, By-Laws of the association, to delete *Robert's Rules of Order, Newly Revised,* as the parliamentary standard of the House of Delegates, substituting therefor *Sturgis Standard Code of Parliamentary Procedure.*

The *Sturgis Code* is clearer and shorter than *Robert's Rules of Order, Newly Revised,* and in addition, the *Sturgis Code* provides parliamentary procedure for reference committees patterned after those of the American Medical Association, the American Academy of Family Physicians, and most state medical associations.

104th Annual Session. There are no amendments to the Constitution or By-Laws pending as a result of actions or introductions from 1971. Your council, however, will stand ready to conduct hearings on any proposals before the present annual session as regards amendments to the Constitution and/or By-Laws.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Organization and Duties. The Council on Medical Service is a constitutional body of the House of Delegates, consisting of nine members, one from each association district, elected for terms of three years each. There are three *ex officio* members who are our president, president-elect, and secretary-treasurer. The council is charged with the responsibility of ascertaining and studying all aspects of medical care in Mississippi. Under the council's jurisdiction are assigned activities of the association in medical service, emergency service programs, medical care for the indigent, and the work of allied medical agencies and organizations.

The council is assisted by seven committees, four constitutional and three *ad hoc,* all of which have conducted formal programs and activities during the 1971-72 association year. These embrace a wide range of subject areas in our purview of responsibility, including maternal and child care, blood and blood banking, mental health, occupational health, nursing, family planning and college health.

Maternal and Child Care. The continuing maternal death studies have been conducted by our committee and now are in the 15th year. The committee published a summary of its studies in the February edition of the JOURNAL. Individual members have had interesting case reports published in the JOURNAL. All of the study data are now computerized and the committee has conducted and published substudies on anesthesia deaths and hemorrhage. The committee works

closely with the Department of Obstetrics and Gynecology of the University Medical Center.

The committee authorized the report, "A Thirteen Year Report, 1957-1969," to be published in the February JOURNAL. It will be the second such report on maternal mortality in Mississippi which has been published in the JOURNAL. It was found that in 1957, there were 75 maternal deaths in Mississippi to 14 in 1969 which marks a tremendous decrease in the number of cases studied by the committee. During this period, the percentage of the total number of deaths from hemorrhage has shown a sharp decline from 59.7 per cent in 1957 to 25.0 per cent in 1969. The data obtained during the 13 year period has enabled the committee to draw a broad picture of the pattern of maternal deaths in Mississippi.

The training of nurse midwives at the University of Mississippi Medical Center has increased the availability of health manpower in the state and should help to further decrease maternal mortality. In one largely rural Mississippi county, the community physicians in collaboration with the local health department are utilizing certified nurse midwives and health aides to provide comprehensive maternal and infant care. In addition to intensive home visiting, prenatal patient education and nutrition supplementation, this health care team also provides in-hospital delivery of the uncomplicated obstetrical patients by nurse midwives working under physician supervision. The abnormal and high-risk obstetrical patients are delivered by the physicians. Within one year, the previously excessive maternal and infant mortality in that county has been decreased to a level which is near the national average. It is hoped that similar programs can soon be started in other areas.

The committee continues to make available sets of "Maternal Health Desk Cards" which are distributed to hospitals through chiefs-of-staff and chiefs of ob-gyn services. The committee conducts regular quarterly meetings to pursue its duties and review case studies.

The chairman is Dr. William B. Wiener of Jackson, and the committee has seven members and three consultants in medicine, pathology, and anesthesiology.

Blood and Blood Banking. This committee was accorded constitutional status by the House of Delegates at the 101st Annual Session in 1969. It has been active in conducting Congressional liaison in connection with National Blood Donors Week and in the issue of a commemorative postage stamp on blood donors in a cooperative effort to focus attention on this acute need.

The committee has further pursued studies on computer-based blood bank inventory information systems and intends to institute a pilot project making use of the association's computer. The committee has approved a three phase operation which would require modest financing by the participating medical institutions.

The committee has kept close watch over the Jackson Blood Assurance Program which became operational in September 1971. This program has recorded more blood donors in the first three months of operation than did the Greenville, South Carolina program in its first year of operation. The Jackson program was modeled after the Greenville program which has been in existence for several years.

The committee has continually reviewed legislative activities of interest within its field and has given valuable consultation in connection with the blood related bills now pending before the 1972 Regular Session of the Legislature.

The committee agreed unanimously to draft a resolution commending Dr. Kenneth M. Heard, as chairman of the Committee on Blood and Blood Banking. The newly appointed chairman is Dr. Warren N. Bell, of Jackson.

Mental Health. Continuing its work in broad areas of mental health, the committee has been acutely aware of problems in drug addiction. During the year, it has conducted educational activities in this connection and made materials available to physicians who have addressed school, youth, and other nonmedical audiences on the subject.

The chief concern this year has been with the development of the new mental health centers in Mississippi. Regional Commissions are now officially organized and operating in 11 of 16 of the state's designated mental health/retardation regions. Seven of these have operating mental health and/or mental retardation programs while the remainder are in various stages of planning. Of these, there are five mental health centers which have been funded with staff grants and are now in operation.

Another major concern of the committee has been drug addiction and drug abuse. Our program of supplying information to physicians and the public on drug abuse has been increased and a special kit of professional information, including reprints of scientific articles, policy statements, brochures, and suggested speeches has been produced and furnished on request.

At the time of preparation of this report, legislation is pending to formalize into statute the creation of a State Board of Mental Health and Mental Retardation and a State Department of

(Turn to page 182)



The President Speaking

'A Word of Warning'

ARTHUR E. BROWN, M.D.
Columbus, Mississippi

SINCE THE NAME of the game is politics, we in the medical profession have become accustomed to the headlines "Health Crisis in America" or a television special "Don't Get Sick in America" or a magazine article "Why You Can't Get a Doctor." We may become accustomed to such sensationalism, but we don't have to like it.

We know that many millions of people are seeing physicians each day. We know that most ailments are self limited and can be adequately managed by a family physician who is able to offer the help that is needed. We know that if referrals to specialists are necessary, they will be made. In spite of all attacks on our system of fee for service, it still seems to be holding its own against prepaid methods.

Dr. Sidney Garfield, founder of the Kaiser-Permanente group, wrote last year in the *Scientific American:*

"The elimination of the fee has been a must in our thinking since it is a barrier to early entry into sick care. Only after years of costly experience did we discover that the elimination of the fee is as much a barrier to the early care of the sick as the fee itself. The reason is that when we remove the fee, we remove the regulator of the flow. The result is an uncontrolled flow of well, worried well, the early sick and the sick into our point of entry on a first come-first served basis that has little relationship to priority of need. The impact of this demand overloads the system and the usurping of available doctors' time by healthy people actually interferes with the care of the sick."

This statement by one of the pioneers in a prepaid care program should caution those who wish to scrap our present pluralistic system. The varied existing systems offer a choice both to patients and to physicians. The interests of both groups would perhaps best be served if a "cooling off" period was called to allow the fog to disperse before any new methods are tried. But since the name of the game is politics, this is not likely to happen. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XIII, NUMBER 4
APRIL 1972

EDITORIALS

The European Brain Drain and the Quest for Excellence

I

THE BRAIN DRAIN emigration of Europe's bright young people westward is a problem of serious proportion on both sides of the Atlantic. There is now no arguing that the continent has become underdeveloped scientifically and technologically in comparison with the United States, and what's more, the gap is growing. In America, the burning question is what to do about the influx.

Notably prominent among these best educated young Europeans seeking admission to the United States each year are as many as 20,000 physicians. For the most part, they possess only the undifferentiated medical degree, and they are seeking quality, advanced postgraduate medical education which is not to be found today in Europe. Only about one out of five is admitted to this nation after taking the examination of the Educational Council for Foreign Medical Graduates, but that leaves an astonishing 4,000 who must be absorbed into the ranks of American medicine each year.

While the preponderance of the exodus west is made up of physicians, there are also engineers, chemists, physicists, and scientific graduates in nearly every discipline. They are of all nationalities except for the hardline, iron curtain countries, being mostly German, French, Austrian, Swedish, and especially English. While the Russians permit no emigration, their anxiety is clearly showing, because Chairman Kosygin proposed a "technological alliance" between Russia and Western Europe during a visit to France. Obviously, the Soviets were worried over the deterioration of the scientific community on the continent and the general absence of postgraduate level academic give-and-take.

It is bitterly ironic that the center of the Renaissance foresees a coming dark age.

II

Almost a third of the more than 30,000 approved residency posts in American teaching hospitals are occupied by foreign medical graduates. Now, by no means is this to say that these are all inferior physicians, but it is also clear that foreign medical schools have not been able to keep pace with American institutions. More than that, the outflow of the brighter graduates from Europe must be viewed as a factor contributing to a widening of the excellence gap.

The Educational Council for Foreign Medical Graduates was established to sift out the better applicants for entry into the United States and to provide an equivalency measure of educational attainment of the émigré-vis-à-vis his American-trained colleague. In most instances, it works well; in some, it has not.

There is also the language barrier, and it's an obstacle of no small import. The ECFMG examination takes this into account, but some say it does not sufficiently emphasize the pressing necessity of fluency in English. Since the greatest number of physician-applicants for admission into the United States is from Great Britain, the central problem is one of training in medicine with lan-

guage no consideration. As a matter of fact, one-third of all British medical graduates, as determined by British surveys, are leaving that country each year. And the number of students entering British medical schools is declining.

III

Besides lamenting the brain drain, the authorities are searching for answers as to why it is happening. Partly, it is money. A typical British intern works an astonishing 100 hours a week for about $200 per month, in terms of U. S. dollars. That figures out to less than 45 cents an hour. But the overriding reason is the scientific climate, and it has become a downward spiral which increases in velocity.

In Europe, over-regulated conditions stymie scientific inquiry. Without inquiry, there is lack of stimulation, and without stimulation, there is stagnation. Thus, the spiral tightens and if anything, becomes irreversible.

From and after World War II, American medicine emerged as the world leader. This posture of leadership has been strengthened with the building of medical facilities in numbers and excellence without parallel in the history of the world. The forward thrust in American medical education and research has left both the free and Communists worlds far behind. The proof of the proposition is clear for all to see: Were this not true, then why would the best brains in Europe be clamoring for entry into the United States? Money alone cannot be the answer.

IV

It is fascinating to observe that some critics of American medicine—and we have them here, too—say that it isn't all that good. Basing their contentions on one sort of statistic or another, they point to infant mortality, the life span, incidence of a given disease entity, or some such unconvincing reason. Nobody deplores any such occurrences, statistical or otherwise, more than American physicians.

But statistics alone are a poor yardstick, indeed, for measuring the quality of a nation's medical community. They must and nearly always do fail to take into account socioeconomic circumstances, genetic background, and even legal considerations, as, for example, abortion laws. What has to do with genes usually has little to do with medicine—as yet. And if a mother is less than well educated in the facts of childbearing, the best facilities and professional resources in the world are of little avail. To this extent, the United States has a poverty of riches in some areas.

Since the end of World War II, exactly 23 American scientists have won Nobel prizes in medicine and physiology. This is more than have been won by all the physicians and scientists in all other countries of the world combined. More than half of the major drug discoveries have been made by Americans in America working for American pharmaceutical companies. Eighty per cent of the prescriptions written today could not have been written in 1957, because the drugs did not then exist.

While England built her one hospital in 20 years, the United States constructed 750, demonstrating that there are valid measures of excellence besides the laboratory. Since the death rate from cancer in the United States is significantly lower than it is in Europe and since cancer is treatable to an extent, then it follows that our lower mortality figures have some meaning in terms of the excellence of medical care. And the same holds true for many other diseases, including tuberculosis, pneumonia, strokes, and influenza.

That we are living 25 years longer today than were our forebearers at the turn of the century and that in the past 25 years medicine has learned more than in the preceding 50 centuries are circumstances to which a nationality cannot be assigned. But when it comes to applying and teaching that knowledge, just about everybody is knocking at the door of the United States. To this ex-



"I'm taking you off your liquid diet."

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug, in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur with relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, jitteriness. In contrast, CNS depression has been reported. In a few epileptics increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.). TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

1 332S (2876)

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Painful night leg cramps...



unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

- Prevents painful night leg cramps
- Permits restful sleep
- Provides simple convenient dosage — usually just one tablet at bedtime

Prescribing Information — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

Merrell

MERRELL-NATIONAL LABORATORIES 1-3508(3050)
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Trademark: Quinamm

Quinamm

(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps.

tent, the brain drain from Europe is a little better understood and takes the shape of a problem with pertinency and relevancy to the times in which we live.—R.B.K.

Obstetrics a la Bankers' Hours

The middle-of-the-night birth myth is exactly that, so says a research team from the New York City Department of Health. Intrigued by the old saw that babies are born in the wee small hours, the team made a study of 4,000 natural births over a six months period. Results: Childbirth is more likely than not to be a working day experience.

The researchers discovered that the most frequent three hour period of the day for births is 9 o'clock in the morning until noon, when 15 per cent of those studied occurred. The least frequent period of three hours was on the opposite side of the day, 9 o'clock in the evening until midnight, when about 10 per cent of the babies came into the world.

From among more than 1,360 first borns, the greatest number, 74, arrived between noon and 1 o'clock in the afternoon, and the smallest number of first borns, 35, were delivered between 2 and 3 o'clock in the morning. While the distribution of first borns throughout the day was more even than others, the three hour period before noon was still the favorite arrival hour.

The researchers logically excluded induced labor and Cesarean sections, but they were interested to observe that most induced labors delivered between noon and 4 o'clock in the afternoon.

Please keep these comforting statistics in mind the next time you deliver a baby at 4 o'clock on a cold, rainy morning.—R.B.K.

The Ethics of Credit Card Financing

Should a physician accept the use of a patient's bank credit card as a means of paying or financing medical care obligations? With the deluge of bank cards flooding the country and exerting a profound effect upon consumer credit, the choice of whether to honor the cards or not for payment of professional services has raised a serious question in medical ethics. And the question has moved the Judicial Council of the American Medical Association to speak out.

Says the council, "Neither endorsement nor disapproval of the bank card system as a means of financing medical expenses should be given at this time." But the key to the opinion is this: "Physician participation in bank card programs is not unethical in and of itself." So the physician may ethically accept bank cards in the payment of current medical bills in lieu of cash or check.

This opinion is strongly qualified by the Judicial Council. The arbiters of ethics say that the use of the cards must be viewed with reserve at the present state of development in consumer credit. While patients should not be denied the right to determine matters of personal budgeting, physicians must not encourage the use of this financing method if it might compromise the ideals of the medical profession or add to the financial burden of the patient.

The patient's well-being is the primary determinant in the physician's ethical decision. It should be kept in mind, the Judicial Council says, that indiscriminate use of bank cards in financing larger medical care costs could result in additional cost to patients.

The Judicial Council has laid down three guiding principles to be applied by the component medical society in behalf of its members who participate in bank card programs:

—The local medical society should satisfy itself as to the financial and professional integrity of the plan. It should negotiate with the plan sponsors to insure that service charges to physicians are reasonable. The society should insist that the plan be open to all physicians on the same terms and that it not exploit or capitalize on physician participation. The plan sponsor should be advised that the listing of physicians in directories of participating members is contrary to medical ethics.

—The individual physician may not, because of his participation, increase his fee for medical services rendered the patient. He may not use the plan to solicit patients. He may not even encourage patients to use the bank card plan. His position must be that he accepts the plan, if, indeed, he does as a participant, only as a convenience to patients who desire to use it. Plaques or devices indicating participation in the plan displayed in the physician's office shall be kept "to a discreet and dignified minimum," the council sternly enjoins. Plaques and signs outside the physician's office indicating participation are unacceptable.

—The use of a bank card in connection with the payment of a larger fee—which normally might be paid to the physician under a mutually satisfactory arrangement over a period of time—

is not to be encouraged. All members of the American Medical Association are expected to continue the traditional practice of permitting patients of limited means to pay relatively large fees over a period of time without interest or carrying charges, the council said. Out of respect for the dignity and traditions of the medical profession, the physician may not relieve himself of his obligations "to render service to humanity, reward or financial gain being a subordinate consideration."

Clearly, the pronouncements of the Judicial Council imply that there may be some fly-by-nighters in the credit card game. But just as clearly, suitable guides are suggested for plans of integrity, such as may be offered by a responsible and soundly-managed bank. And, as in all things involving medical ethics, the issue is one of choice, taste, propriety, judgment, and just dealing, for with physicians, service is the primary goal.—R.B.K.

NEW MEMBERS

BRASWELL, GUY RAY, Grenada. Born McCool, Miss., Nov. 8, 1933; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1964; interned USAF Hospital, Keesler AFB, Biloxi, Miss., one year; ophthalmology residency, University of Tennessee, July 1, 1968-June 30, 1971; elected November 1971 by North Central Mississippi Medical Society.

CALLAHAN, JOEL TRAVIS, Meridian. Born Starkville, Miss., June 1, 1940; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1965; interned Chatham County Memorial Hospital, Savannah, Ga., one year; resident (medicine), same, one year; resident (medicine), Ochsner Foundation Hospital, New Orleans, La., 1967-69; elected February 1972 by East Mississippi Medical Society.

CROSTHWAIT, JAMES LEWIS, Jackson. Born Greenwood, Miss., Mar. 3, 1938; M.D., Johns Hopkins University School of Medicine, Baltimore, Md., 1963; interned Grady Hospital, Atlanta, Ga., one year; resident (internal medicine), same, 1964-66; cardiology fellow, same 1966-68; elected September 1971 by Central Medical Society.

EASLEY, WILLIAM FRANKLIN, Meridian. Born Hattiesburg, Miss., Feb. 12, 1938; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1964; interned Brooke General Hospital, Ft. Sam Houston, Tex., one year; resident (internal medicine), same, 1965-69; elected Feb. 1, 1972 by East Mississippi Medical Society.

MILLER, JOHN HAMPTON, Grenada. Born Natchez, Miss., Sept. 8, 1937; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1962; interned Chatham County Memorial Hospital, Savannah, Ga., one year; ob-gyn residency, Parkland Memorial Hospital, Dallas, Tex., 1967-1970; elected by North Central Medical Society November 1971.

ROE, JOSEPH EDWARD, Oxford. Born Clarksville, Tenn., Aug. 25, 1936; M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1962; interned same, one year; surgery residency, V.A. Hospital, Memphis, Tenn., 1966-1970; elected by North Mississippi Medical Society October 1971.

TABB, W. GRANVILLE, JR., Jackson. Born Blaine, Miss., Sept. 27, 1917; M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1943; interned John Gaston Hospital, Memphis, Tenn., one year; elected by Central Medical Society September 1971.

TREADWELL, T. WALTER, JR., Jackson. Born Miami, Fla., Oct. 25, 1932; M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1957; interned University Hospital, Jackson, Miss., one year; surgery residency, same, July, 1959-Oct., 1959; internal medicine residency, same, Oct. 1959-Oct. 1961; cardiopulmonary fellow, same, 1961-1963; elected by Central Medical Society September 1971.

Hospital Safety Seminar Scheduled

The National Safety Council will sponsor a seminar on national hospital safety May 1-3 at Stouffer's Inn in Indianapolis.

Speakers and panels will discuss patient safety and preventive medicine as it applies to safety and the application of the Occupational Safety and Health Act in the field of hospital safety.

For further information write Mr. Phil Weiner, The National Safety Council, 425 N. Michigan Avenue, Chicago, Ill. 60611.

"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

Opinion

Results of a questionnaire to 7000 physicians:

82.8%
Physicians should play a role

78.3%
Independent scientists should play a role

69.8%
Medical academicians should play a role

Opinion & Dialogue

Dialog

Should nongovernment scientists and physicians play a role in drug regulation?

Doctor of Medicine

Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968-1969) Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations,



state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of the medical comm*and* federal regulat will often be represen simplistic and some misleading terms.

One illustration misuse of the media regard is the recall o coagulant drugs s years ago. This FDA was given publicity press and television went far beyond its able importance. The was a very uncomfo situation for the p tioner who had pa taking these medica Since the practitione pharmacist had not informed of the acti the time it was publi in most states they deluged with calls worried patients.

The practitioner c tempt to solve these lems of inadequate co nication in several One would be the cr of a communication in state pharmacy soc When drug regulation is to be announced, t ciety could immedi distribute a message ery pharmacist in the The pharmacist, in could notify the phys in his local communi that he and the phys could be prepared t swer inquiries fron tients. Another app would be to use pr sional publications practitioner receives.

All of this leads b my opening contenti drug regulation is to fective, timely, and r to the realities of c practice, a better meth communication and back must be develope tween the nongovern tal medical and scie communities and the latory agency.

ue

Maker of Medicine

Henry W. Gadsden,
rman & Chief Executive
ficer, Merck & Co., Inc.



my opinion, it is the onsibility of all physi- and medical scientists ke whatever steps they are desirable in a law- regulation-making ess that can have far- hing impact on the tice of medicine. Yet v events in the recent indicate that this is happening. For exam- it is apparent from efficacy studies that NAS/NRC panels gave consideration to the nce that could have provided by practic- physicians.

here are several current lopments that should ease the concern of icing physicians about regulatory affairs. One proliferation of mal- ice claims and litiga- Another is the effort overnment to establish relative efficacy of s. This implies that if ysician prescribes a other than the "estab- d" drug of choice, he be accused of practic- something less than -class medicine. It ld come perilously to federal direction of medicine should be iced.

order to minimize this of arbitrary federal on, a way must be d to give practitioners voice and represen- tation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in *proving* precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted *prima facie* as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings—where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

The Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

April 17-21, 1972

CARDIOLOGY INTENSIVE COURSE

University Medical Center, Jackson
April 17-21, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

Patrick H. Lehan, M.D., professor of medicine and Mississippi Heart Association Love Memorial Research Professor of Cardiology, The University of Mississippi School of Medicine

Bedside diagnosis of heart disease is the emphasis in this one-week intensive course. Course content will include practical points in physical diagnosis and review of the various forms of heart disease, using such aids as pulse tracings, phonocardiograms, electrocardiograms, x-rays and hemodynamic data. Registrants will round, observe cardiac catheterizations and join team discussions on patient management.

April 24-28, 1972

RADIOLOGY INTENSIVE COURSE

University Medical Center, Jackson
April 24-28, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

Robert D. Sloan, M.D., professor of radiology and chairman of the department, The University of Mississippi School of Medicine

Registrants will witness radiologic procedures in the diagnostic, therapeutic, and isotope areas, as well as participate in sessions dealing with artefacts, equipment, techniques and radiation safety. Diagnostic conferences will demonstrate practical points of radiographic interpretation, stressing both the value and limitations of clinical radiology.

May 1-5, 1972

NEPHROLOGY INTENSIVE COURSE

University Medical Center, Jackson
May 1-5, 1972, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

John D. Bower, M.D., associate professor of medicine, The University of Mississippi School of Medicine, and director, artificial kidney unit, the University of Mississippi Medical Center

This one-week intensive course will stress the reversible and treatable forms of kidney disease. Participants will study the management of acute kidney failure and control of reversible features of chronic kidney disease. Course content also includes management of pyelonephritis, fluid and electrolyte problems and acid base balance.

CIRCUIT COURSES

SOUTHWESTERN CIRCUIT

McComb—April 11—Session 3; Southwest Mississippi General Hospital, 7 p.m.
Session 3—Case Presentations: Pulmonary Emboli

NORTHERN CIRCUIT

Columbus—April 25—Session 3; Ramada Inn, 6:30 p.m.
Session 3—Inhalation Therapy, Dr. T. Walter Treadwell
Postoperative Intensive Pulmonary Care, Dr. Hilary H. Timmis

FUTURE CALENDAR

April 10-14
PEDIATRICS INTENSIVE COURSE

April 11
CIRCUIT COURSE, MCCOMB

April 17-21
CARDIOLOGY INTENSIVE COURSE

April 24-28
RADIOLOGY INTENSIVE COURSE

April 25
CIRCUIT COURSE, COLUMBUS

May 1-5
NEPHROLOGY INTENSIVE COURSE

May 8-11
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

LETTERS

SIRS: I would like for you to run the following in the "Letters to the Editor" section of your journal. Hopefully physicians will respond to this.

I am editing a book on the role of faith or religion in healing from a physician's standpoint. Any physician interested in contributing to this book, please write to me at the following address: 4-C Doctors Park, Asheville, N. C. 28801.

CLAUDE A. FRAZIER, M.D.

SIRS: I read with great interest Dr. William B. Wiener's 13 year report on maternal mortality in Mississippi, which appeared in the February issue of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION. It brings to mind the early days of the committee and the great amount of work that everyone put in to make this a worthwhile study. The committee has certainly done a wonderful job with it. Congratulations!

MICHAEL NEWTON, M.D., FACOG
DIRECTOR, THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS
CHICAGO, ILL. 60603

DEATHS

CLARK, LAURANCE JAMES, SR. M.D., Tulane University School of Medicine, New Orleans, La., 1923; interned Charity Hospital, Vicksburg, Miss.; Emeritus member of MSMA and AMA; died Feb. 6, 1972, age 73.

RUTLEDGE, ELISE MCLAURIN. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1916; interned Women's Hospital, Detroit, Mich.; resident (surgery), Bellevue Hospital, New York City, N. Y. 1921-23; member of the Fifty Year Club of MSMA; Emeritus member of MSMA and AMA; died Feb. 9, 1972, age 81.

TYRONE, NELSON OTIS. M.D., Tulane University School of Medicine, New Orleans, La., 1934; interned Touro Infirmary, New Orleans, La., 1934-36; died Feb. 4, 1972, age 62.

PERSONALS

RICHARD BURMAN of Gulfport was guest speaker at the Coast Counties Medical Assistants Association meeting and buffet held in Gulfport.

EUGENE A. BUSH, SR. of Laurel has announced his retirement after practicing medicine in Laurel since 1932.

ROBERT A. CAMERON announces the opening of his office for the general practice of medicine at 1429-A Market Street in Pascagoula.

REED CARROLL of Greenwood was presented the coveted Silver Beaver Award at the annual banquet of the Delta Area Council of Boy Scouts in Cleveland.

ROBERT CARTER of Biloxi was crowned king of the 45th annual Les Masquees carnival ball held in the Buena Vista Hotel.

S. J. CHUNG and ARTHUR J. STARR have joined the pathology staff of St. Dominic-Jackson Memorial Hospital in Jackson.

D. J. ENGER of Pascagoula spoke to members of the Gulf Coast Society of Radiologic Technologists at their February meeting at Singing River Hospital.

TOM GANDY of Natchez has been appointed chairman of the Architectural Review Authority established in Natchez to help preserve and protect historic or architecturally worthy structures in the city.

JAMES D. HARDY of Jackson recently appeared on the "Conversation" program of Mississippi Educational Television. In an interview with KENNETH BENNETT, also of Jackson, Dr. Hardy discussed research, organ transplantation, surgical training, and the financial side of the study of medicine today.

MELVIN R. HOLMAN has associated with RICHARD S. HOLLIS and RAYMOND V. LASSEN, JR., of Amory in the practice of obstetrics and gynecology at Physicians and Surgeons Clinic, South Boulevard Drive.

W. B. HOPSON, JR., of Vicksburg has been named to a new Advisory Board created to work closely with the directors in the management of Merchants National Bank.

DONALD E. KILLELEA of Natchez moderated a session on the increasing importance of nosoco-

mial infection of the American Academy of Pediatrics postgraduate course number six held recently in New Orleans and sponsored by Tulane University.

JAMES M. LANDEEN has joined the Jones County Community Hospital medical staff as associate staff member with privileges in otolaryngology. Dr. Landeen's office is located at 1203 Jefferson Street in the Medical Arts Building, Laurel.

WILLIAM E. LOTTERHOS of Jackson has been reappointed to the Council on Scientific Assembly of the American Medical Association.

J. R. MARKETTE of Brookhaven was recently honored by Lincoln countians with Dr. J. R. Markette Appreciation Day.

GEORGE NASSAR, JOHN WOFFORD, and JOHN HEY, all of Greenwood, have been elected medical representatives of the Leflore County Heart Association.

F. LINDSEY RISHER of Laurel has been named director of Comprehensive Health Planning by Gov. Bill Waller.

CHARLES E. STRAUSS has associated with DAN REIKES, CARL RAY HALE, and DARCEY G. KOBS of Hattiesburg in the practice of radiology.

THOMAS W. TALKINGTON, JR., of Jackson and WILLIAM C. SANDERS of Columbus have been inducted as Fellows of the American Academy of Orthopaedic Surgeons.

WILLIAM LEWIS THORNTON of Meridian was named king of the annual Meridian Junior Auxiliary Charity Ball. Dr. Thornton was chosen because of his "outstanding leadership and devotion to his family, church, profession and community."

RAY WESSON of Ocean Springs has been selected by the state Jaycees as one of Mississippi's three outstanding young men of the year. The Distinguished Service Awards were announced at a DSA banquet during the Jaycees' winter board meeting.

MECO Plans 1972 Summer Assignments

Tom Greer, SAMA-MECO chairman for 1972, has announced that 33 hospitals are participating in the program this year in contrast to 24 last year. Hospitals and physicians will be notified which students they will be assigned for the summer in early April. The Medical Education-Community Orientation program is sponsored by the Student American Medical Association chapter at UMC with the support of MSMA and the Mississippi Hospital Association.

AHA Names Dr. Brown Acting Chief Executive

Dr. Madison B. Brown, formerly deputy director of the American Hospital Association, has been named acting executive president of the Association. The announcement was made by Stephen M. Morris, president of the 7,000 member group.



Dr. Brown

The announcement was made after the death of Dr. Edwin L. Crosby, who served as the Association's chief executive officer for the past 18 years. Dr. Crosby died unexpectedly of a stroke on Feb. 20. He was an internationally recognized authority on health care and hospital services.

Dr. Brown, 60 years old, has been a staff member of the Association since 1956 and came to the post from Hahnemann Medical College and Hospital of Philadelphia where he served as executive vice president.

Since joining the Association, Dr. Brown has served in various capacities in the professional affairs of the national body. He was chairman of the Special Advisory Group of the Veterans Administration from 1969 to 1971. He is currently the vice chairman of the Commission on Foreign Medical Graduates. He is also a lecturer in the Department of Medicine of Northwestern University and a member of the Board of the Commission on Professional and Hospital Activities located in Ann Arbor, Mich. and served as that Board's president from 1969 to 1971.

Dr. Brown graduated from the University of Vermont College of Medicine and interned at the Mary Hitchcock Memorial Hospital in Hanover, N. H. He is a Fellow of the American College of Hospital Administrators.

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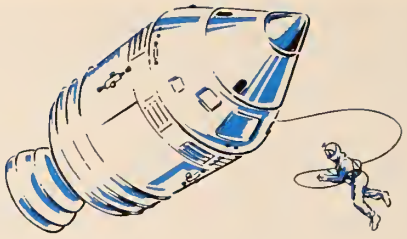
PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

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*May be habit forming.

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Book Reviews

Current Diagnosis and Treatment. By Marcus A. Krupp, M.D., and Milton J. Chatton, M.D. 962 pages. Los Altos, California: Lange Medical Publications, 1972. $11.00.

This book is composed of 30 chapters, by different authors, and arranged by both organ systems and specific diseases.

Many of the diseases described have a brief listing of the "essentials for diagnosis" which saves time for the busy physician. The sections on clinical findings and differential diagnosis seem to be reasonably thorough, although evaluation of these sections is necessarily not only dependent upon the author's skill of presentation, but the reviewer's finite knowledge of each particular disease. The material presented is felt to be essentially good.

Treatment and diagnosis sections are good, although the authors follow their preface statement that only "widely accepted" methods would be mentioned. We noted that several treatments which we felt were widely accepted in our area were not mentioned.

The appendix is excellent, covering concisely many things from foreign travel immunization requirements to heart-lung resuscitation methods.

Indexing, with minimal cross indexing, appears adequate.

As a book intended to serve the practicing physicians for reference on the most widely accepted technics currently available for diagnosis and treatment, we believe the authors have only partially succeeded in their purpose. However, as stated in the preface, they deal primarily with internal medicine disorders, yet the practicing physician is confronted with a variety of disorders, many of which, he searches his reference resources for suggestions for diagnosis and treatment. Our first two uses of the book concerned the use of isotopes as adjuncts in diagnosis of thyroid and liver disease. We were unable to locate suggestions for the use of isotopes in these conditions and assume the authors did not consider isotopes as widely enough accepted modalities for inclusion.

We note that 35 of the 36 authors are from the California area which slightly limits the book to a regional scope. We therefore question whether the statement in the preface for "the most widely accepted technics currently available" is justified.

We feel that the book is worth the price of $11.00 and a useful addition to the physician's desk.

LAWRENCE H. BRISCO, M.D.

Handbook of Poisoning: Diagnosis and Treatment. Ed. 7. By Robert H. Dreisbach, M.D., Ph.D. 515 pages with illustrations. Los Altos: Lange Medical Publications, 1971. $6.00.

This book answers a real need in giving the physician dealing with a poisoned patient a well written, thorough yet concise, usable manual that assists in caring for the entire patient.

This handbook has a wider scope than any other I have seen on this subject. I would especially recommend it to any doctor who cares for patients who are involved in industrial jobs. Not only because of the section on Industrial Hazards but also the general approach to total patient care as outlined in the first section of the book incorporates a wide scope of varied problems that the industrial physician is likely to see. This book would also be excellent for a safety engineer at almost any large plant.

The index is large and enables you to find quick help in locating information on specific poisons, while the table of contents will help when you want to know about whole categories of poisons.

It presents to the physician an excellently organized systematic resource. Drugs and other poisons are discussed in groups as to lethal dose, mode and time of action, how excreted, complete effects, and specific treatment. Under the same cover you have almost everything you need to know about handling poisoning.

JOHN R. JACKSON, JR., M.D.

AMA Schedules Congress on Occupational Health

The 32nd annual AMA Congress on Occupational Health will be held at The Drake Hotel in Chicago, Sept. 11-12, 1972.

For further information, please write Dr. Henry F. Howe, Secretary, Council on Occupational Health, American Medical Association, 535 North Dearborn Street, Chicago, Ill. 60610.

UMC Sets Family Planning Workshop

The family planning division of the University of Mississippi School of Medicine Department of Obstetrics and Gynecology will offer a three-day workshop in family planning, April 17-19. Coordinated by family planning division director Dr. George Huggins, the course will feature guest speaker Dr. Jaroslav Hulka of the University of North Carolina School of Medicine at Chapel Hill.

Registrants will discuss and observe laparoscopy, a new surgical female sterilization technique, review current concepts of contraception, and tour the new Bailey Avenue Family Planning Clinic.

The tuition-free course is funded through Emory University School of Medicine by the National Center for Family Planning Services. Open to physicians from across the state, registration is limited to six. Advance enrollment is required.

Extra-Corporeal Technology Meet Set

The Tenth International Conference on Extra-Corporeal Technology will be held on July 27-29, 1972, at the Waldorf-Astoria in New York City.

This meeting will feature presentations on dialysis, heart-lung, and artificial organs technology.

For further information, write: Edward C. Berger, Executive Director, American Society of Extra-Corporeal Technology, Inc., 287 East Sixth Street, St. Paul, Minn. 55101.

Bishop Brunini Receives AMA Award



The Most Reverend Joseph B. Brunini of the Diocese of Jackson—Natchez has been presented a formal certificate of appreciation by the American Medical Association for his distinguished service as a member of the Committee on Medicine and Religion. Dr. John M. Alford, Jr., of Greenwood, chairman of the MSMA Committee on Medicine and Religion, second from left, made the presentation on behalf of AMA to the Bishop at the Board of Trustees' luncheon at Primos' Northgate Restaurant. Assisting were the association's AMA delegates, Drs. C. D. Taylor, Jr., of Pass Christian, at left, and G. Swink Hicks of Natchez.

Specialty Societies, Concurrent Meetings Highlight the 104th Annual Session

More than 15 specialty society and related activities will hold concomitant meetings with the association's 104th Annual Session in Biloxi, May 8-11, 1972, at the Sheraton-Biloxi.

The American College of Surgeons, Mississippi chapter, has set its annual meeting for Tuesday, May 9. President W. Coupery Shands of Jackson will preside over the scientific session beginning at 12:45 p.m. Guest speakers include Drs. Oliver H. Beahrs of Rochester, Minn., and William H. Moretz, Augusta, Ga.

The Louisiana-Mississippi Ophthalmological and Otolaryngological Society will meet May 11-13 at the Broadwater Beach Hotel in Biloxi. Beginning with the MSMA combined scientific Section on Eye, Ear, Nose and Throat and Pediatrics on Thursday, May 11, the society will hold an extensive scientific program over the ensuing weekend, including golf and tennis tournaments, a seafood jamboree, and dinner dance.

Members of the Mississippi Urological Society will convene Monday, May 8, at the Sheraton-Biloxi for a luncheon followed by a business meeting. Dr. Charles D. Scruggs of Jackson is president.

State radiologists will attend a fellowship hour and scientific program at the Sheraton-Biloxi on May 7. Dr. J. V. Ferguson of Greenwood is president of the Mississippi Radiological Society.

The Mississippi Orthopaedic Society will conduct a luncheon on Monday, May 8, at the headquarters hotel. President Louis A. Farber of Jackson will preside.

Preceding the section meeting on Tuesday, May 9, the Mississippi Ob-Gyn Society will have a cocktail party and luncheon. Dr. Charles Head of Jackson is president.

Mississippi Society of Internal Medicine will conduct a luncheon meeting at noon on Wednesday, May 10. Dr. G. S. Barnes of Columbus is president and Dr. John R. Shell of Vicksburg is president-elect.

Family physicians will gather when the Mississippi Academy of General Practice sponsors a luncheon meeting on Wednesday, May 10, in the Top of the Sheraton. President James O. Stephens of Magee will preside. Dr. Eugene Webb of Itta Bena is president-elect.

Dr. Thad Rodda of Clarksdale, president of the Mississippi Association of Pathologists, will preside over the executive committee and business meetings of the association on May 7 at the Sheraton-Biloxi. Monday morning will feature a special scientific program and proficiency testing sessions for the pathologists.

The Mississippi EENT Association will host a business meeting and luncheon on Thursday, May 11. Dr. James K. Williams of Pascagoula is president.

The Mississippi chapter of the Flying Physicians Association is sponsoring a cocktail party and buffet dinner on Tuesday evening. Special guest speaker will be Dr. Francis X. Sommer of Barbourville, Ky., national FPA president.

Two postgraduate courses will be offered concurrently with the annual session. A two day course in obstetrics for the family practitioner will be held May 6-7 at the Sheraton-Biloxi and is sponsored by the American College of Obstetrics and Gynecology and the UMC Department of Ob-Gyn. Dr. Donald M. Sherline is course coordinator.

A one hour course in practical tonometry for non-ophthalmologists will be given on three consecutive days, May 9, 10, 11, by the Mississippi EENT Association and the Mississippi Society for Prevention of Blindness.

Three medical alumni meets are set for the convention week. Ole Miss medical alumni, their

ladies and guests will meet on Monday, May 8, at the Sheraton-Biloxi. A general business meeting will be followed by the cocktail party and seafood jamboree dinner-dance. Dr. Frank L. Schmidt of Pass Christian is program chairman and Charles William Price, alumni secretary, is in charge of arrangements.

Tennessee medical alumni will enjoy cocktails and dinner on Tuesday evening, May 9. Dr. Frederick E. Tatum of Hattiesburg is chairman and Mr. June Montgomery, UT director of Alumni Affairs, will be present.

Graduates of Tulane University will be feted at an informal cocktail party on Tuesday evening, May 9. Dr. M. E. Lapham, executive secretary of the alumni association, and Mrs. Rose B. Koppel, administrative assistant, are handling arrangements.

The 17 living MSMA past presidents will enjoy a breakfast meeting on Wednesday morning, May 10. Dr. Paul B. Brumby of Lexington, immediate past president, is host.

Members of the Fifty Year Club will be honored at a special luncheon on Tuesday. The annual reference committee breakfast will be held Monday, May 8.

Past presidents of the Woman's Auxiliary have scheduled a breakfast meeting on Wednesday, May 10. Mrs. Curtis Caine of Jackson is hostess.

Other events include the association cocktail party, May 10, at 6:00 p.m.; and annual golf tournament to be conducted at Sunkist Country Club on Wednesday. Dr. A. V. Hays of Gulfport is in charge of the golf tournament arrangements.

Ocean Springs Declares Amphetamine Moratorium

The medical staff of Ocean Springs Hospital has declared a moratorium on prescriptions for amphetamines, according to a resolution signed Feb. 11, 1972, by Dr. Ray L. Wesson, Chief of Staff, and Dr. Louis A. Rubenstein, secretary.

The resolution stated: "Therefore, be it resolved by the medical staff of Ocean Springs Hospital, that we do hereby declare a six month moratorium on the use of amphetamines except in cases of narcolepsy, hyperkinesis, and certain psychiatric disorders.

"Be it further resolved, that copies of this resolution be furnished to local druggists, and that they consider discontinuing the stocking of amphetamines in their pharmacies.

"Be it further resolved, that copies of this resolution be furnished to the Coast Counties Medical Society, the Singing River Medical Society and the Mississippi State Medical Association for their consideration and support."

FPA President Speaks at Annual Session



Dr. Francis X. Sommer of Barbourville, Ky., president of the Flying Physicians Association, stands alongside his over-loaded Beechcraft Bonanza in which he made a round-the-world flight and established three international speed records: New York to Paris; Tokyo to Point Barrow; Point Barrow to New York. Dr. Sommer will speak before Mississippi FPA members and guests on Tuesday, May 9, at the Sheraton-Biloxi.

Clinical EEG Course Scheduled

Under the auspices of the Training and Education Committee of the American Electroencephalographic Society, a continuation course on "Clinical Electroencephalography" will be held Oct. 9-11, 1972, at the Shamrock Hilton Hotel in Houston, Tex.

The Course is designed to review the fundamentals and principal applications of electroencephalography to clinical medical practice. A distinguished faculty will present the material, whose expanded curriculum will include time for individual interpretation sessions and closed-circuit TV demonstrations.

This Course is approved by the American

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of moderate to severe intensity

Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe – day or night – even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

The long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used caution in patients about to undergo surgery of the biliary t

Patients Receiving Narcotics. Talwin is a mild narcotic antag Some patients previously receiving narcotics have experienced withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is adminis to patients prone to seizures; seizures have occurred in a few patients in association with the use of Talwin although no caus effect relationship has been established.

Adverse Reactions: Reactions reported after oral administr of Talwin include *gastrointestinal:* nausea, vomiting; infrequ constipation; and rarely abdominal distress, anorexia, diar *CNS effects:* dizziness, lightheadedness, sedation, euphoria, l ache; infrequently weakness, disturbed dreams, insomnia, syn visual blurring and focusing difficulty, hallucinations (see *CNS Manifestations* under WARNINGS); and rarely tremor, tability, excitement, tinnitus. *Autonomic:* sweating; infrequ flushing; and rarely chills. *Allergic:* infrequently rash; and r urticaria, edema of the face. *Cardiovascular:* infrequently dec in blood pressure, tachycardia. *Other:* rarely respiratory depres urinary retention.

Dosage and Administration: *Adults.* The usual initial adult do 1 tablet (50 mg.) every three or four hours. This may be incr to 2 tablets (100 mg.) when needed. Total daily dosage should exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in tion to analgesia, aspirin can be administered concomitantly Talwin.

Children Under 12 Years of Age. Since clinical experience in dren under 12 years of age is limited, administration of Talw this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have rec Talwin orally for prolonged periods have not experienced drawal symptoms even when administration was abruptly di tinued (see WARNINGS). No tolerance to the analgesic effec been observed. Laboratory tests of blood and urine and of liver kidney function have revealed no significant abnormalities prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin dosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and supportive measures should be employed as indicated. Assiste controlled ventilation should also be considered. Although n phine and levallorphan are *not* effective antidotes for respira depression due to overdosage or unusual sensitivity to Talwin, enteral naloxone (Narcan®, available through Endo Laboratorie a specific and effective antagonist. If naloxone is not available, enteral administration of the analeptic, methylphenidate (Ritali may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet con Talwin (brand of pentazocine) as hydrochloride equivalent to 50 base. Bottles of 100.

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pentazocine (as hydrochloride)

the long-range analgesic

Medical Association Council on Continuing Medical Education.

Inquiries about further details of the Course or registration procedures should be addressed to: Dr. Donald W. Klass, EEG Course Director, Mayo Clinic, Rochester, Minn. 55901.

Drug Abuse Detection Tests Developed

Two new laboratory diagnostic control test products which will enable clinicians more quickly to identify both the presence and quantity of narcotics, amphetamines and barbiturates in suspected drug abusers have been introduced by Lederle Laboratories.

Leading clinicians from the United States were the first to see the new control substances in action during special workshops at an Atlanta meeting of the American Society of Clinical Pathologists.

The new diagnostics are Lederle Urine Toxicology Control and Lederle Serum Toxicology Control.

Mr. R. A. Schoellhorn, Lederle general manager, noted, "These products will help clinicians and laboratory technologists throughout the country in their efforts to raise the level of proficiency in the detection of such drugs. This will allow earlier identification of drug abusers which should contribute substantially to more effective treatment."

Dr. Thorne J. Butler of the Southern Nevada Memorial Hospital in Las Vegas, and a member of the original research team which developed the controls, conducted two day-long "wet" workshops, or working sessions, at the Atlanta pathologists' meeting. Doctors and technologists attending the workshop performed their own diagnostic tests using the serum and urine controls, under Dr. Butler's supervision.

"Until now we've had to use homemade identification measures," Dr. Butler explained as he discussed the significance of the body fluid test controls. "Many of our problems will be alleviated with this kind of improved control methodology. The challenge of identifying drugs properly can be met."

The new Lederle test controls closely approximate the natural body fluids of the patient being tested. They will be used in conjunction with the standards presently used in drug identification tests, which are aqueous, or water-based. The physiological base employed in the new products measures control levels in blood serum or urine, and will provide more efficient results.

"By using thin-layer chromatography, a test of positive identification, with the toxicology control product, it is possible to have an accurate description of the drugs present in a specimen within two hours after the sample is taken," Mr. Schoellhorn commented.

MAMA Holds FIRST Educational Symposium

"Focus on the Future" as viewed from the role of the professional medical assistant was the theme of the first annual educational symposium presented by the Mississippi Society of the American Association of Medical Assistants in the Nursing School Auditorium, University Medical Center, Jackson. Invitations to send their assistants were issued to all practicing physicians in the state.

Speakers for the day included Hilton Bowers, director, Division of Medical Care Plans, MSMA, who described the EMCRO program and explained the need for peer review; and Michael J. Malouf, Jackson attorney, who discussed malpractice and stressed the medical assistant's legal obligation to the patient and her duty, as his agent, to the physician.

Mrs. Elvera M. Fischer, CMA, AAMA past-president, Chicago, talked on professionalism, stressing the need for personal goals to achieve greater job satisfaction and the need for more educated assistants in the medical profession. Mrs. Ethel Haase, CMA, AAMA trustee, Chicago, spoke about communication, "a two-way business with feedback," and outlined the five steps of communication: concept of the idea, putting it into good words, transmitting the idea, receiving through hearing or reading, and perception by the recipient.

"If an Elephant Answers," a film on proper telephone technique, was presented by South Central Bell.

Mrs. Thelma VanCloostere, state president, Long Beach, welcomed members and guests, and Mrs. Mary Adeline Pace, state education committee chairman, Jackson, presided.

Central Chapter, AAMA, MS, served as hostess for the event with Mrs. Mary Brooks, local president, as chairman. Mrs. Carol Smith, Miss Carol Lockey, and Mrs. Thelma Nowell served as members of her committee.

Miss. Arts Festival Announces Guest Artists

A top pops performer, a quartet of operatic luminaries, a country music great, and a tradition-shattering dance company will be headliners at the 1972 Mississippi Arts Festival.

Dionne Warwicke, 1971's top female vocalist, will appear twice at the Coliseum during the year's most spectacular celebration of the arts April 25-30 in Jackson.

A fine arts evening, also scheduled twice during Festival week, will feature Gail Robinson, a Mississippi-born beauty whose coloratura soprano voice made her a Metropolitan Opera star at the age of 22; Enrico DiGiuseppe, the Met's outstanding young tenor whose recorded voice breaks glass on recent television commercials; Beverly Wolff, the New York City Opera's magnificent "other" Beverly, a mezzo-soprano who ranks uppermost as opera singer, concert soloist and recitalist; and William Walker, a leading Met baritone and popular television talk-show guest.

The four opera singers will be featured with the Jackson Symphony Orchestra on a double bill with Chet Atkins, known throughout the world as "Mr. Guitar" for his skill at plucking melodies from country to classical.

Mimi Garrard's Dance Company will perform an unusual program of modern dance in the City Auditorium six times during Festival week. This includes five nightly performances and a new Saturday matinee.

Besides these stellar performances, Festival-goers will be treated to scores of artistic and cultural events in the exhibition buildings at the Fairgrounds and in the Old Capitol Building. Dozens of events will be offered by Mississippians for Mississippians—an expected 150,000—in this annual showcase of talent.

Seminars this year will feature Alice Winchester, for 35 years the editor of the prestigious *Antiques* magazine, and James T. Whitehead, author of the recent novel *Joiner* and a former Millsaps professor.

The Festival's new Film Celebration will feature winners of the first annual Film Competition, movie classics, and award-winning international shorts. They'll be screened continuously for the pleasure of Festival-goers.

Participation is the key word for many events. The innovative Artisans in Action exhibition will feature 75 artisans from around the country creating objects of beauty and usefulness and giving informal explanations of their techniques.

The Coffee House will again offer its daily program by the best of Mississippi's musicians, but this year there's something new. There will be a special "It's Hard to Be Hip Over 25" night with entertainment geared to adults only. A nightly Coffee House competition will culminate on Sunday afternoon when the five nightly winners return to compete for a free professional taping session.

A junior high school "Paint-In" will provide more artistic action on the fairgrounds, but artistic expression may reach its peak at the Circus Studio, this year's revamped Youth Pavilion. Youngsters from four to ten years of age will have an opportunity to be creative with clay, paint, corrugated cardboard, scissors and paper, and other materials in the five rings of the studio. Old clothes are de rigueur for participants, Festival officials advise. Youth concerts, children's theatre, and story hours will also be offered youngsters, and the Railroad Rascals from Memphis will travel the midway in a colorful train to present puppet shows.

Art exhibits will be everywhere. These include arts and crafts, children's art sponsored by the state's junior auxiliaries, clothesline art exhibited by the Art Enthusiasts Club, high school art, and the Mississippi Art Association's exhibition and its Collegiate Art Show. There's also the Statewide Art Sale, and in the tent there will be a display of paintings by some of the finest Mississippi artists to entertain Festival-goers as they sample



Among the many physicians' wives involved in planning the 1972 Arts Festival are, from left, Mrs. James Gordon, co-chairman of dollmaking; Mrs. James N. McLeod, Coffee House co-chairman; and Mrs. Kenneth Pittman, all of Jackson.

pizzas and other culinary creations to be sold there.

The midway, too, will go artistic with sculptured trees and a fountain by Sam Gore, chairman of the Mississippi College Art Department. Bands performing at the bandstand will also enliven the midway.

Traditionally, the planning and preparation for the Mississippi Arts Festival is done by hundreds of enthusiastic volunteers, many of whom are representatives of Jackson's medical community, and this year is no exception. More than a dozen medical wives have been serving in key positions on the various committees and their many efforts will be evident during the spectacular 1972 Arts Festival April 25-30.

Mrs. Alvin Brent, Jr., is chairman of the exciting new Artisans in Action exhibit and under that same overall category, Mrs. James Gordon is co-chairman of doll making and Mrs. J. George Smith and Mrs. Ancel C. Tipton are co-chairmen of jewelry.

"Circus Studio," which is the youth pavilion, will represent many hours of planning by Mrs. Robert L. Abney, co-chairman, and others on that committee; while the popular Coffee House has been the responsibility of Mrs. James N. McLeod, overall co-chairman, Mrs. Robert Hudgins, co-chairman for waiters and waitresses, and numerous other volunteers.

Other medical wives and their Arts Festival duties include: Mrs. John Kitchings, program advisor; Mrs. Noel C. Womack, Jr., chairman, public relations; Mrs. Louis A. Farber, chairman, and Mrs. James O. Manning, co-chairman, "The Tent" and Little Gallery; and Mrs. Warren Bell, youth concerts.

Ticket packets—priced at $5, $10 and $15—cover two evenings of Coliseum events, plus a program in the City Auditorium. Information may be obtained by writing Mississippi Arts Festival, P. O. Box 4354, Jackson 39211.

Roerig Announces New Parasite Drug

The Roerig Division of Pfizer Pharmaceuticals has introduced a new prescription drug for use in the battle against parasitic infections of human hosts.

Roerig announced it has received FDA approval to market Antiminth® (pyrantel pamoate) Oral Suspension, a single-dose anthelmintic agent for the treatment of pinworm and roundworm infections.

Dr. George R. Stanley, medical director of Roerig, said that worm infections represent one of medicine's more neglected areas.

"Though these infections are not life threatening, they can have a serious effect on behavior, especially in children," Dr. Stanley said. "They can cause nervousness, irritability, insomnia and nightmares, and critically affect a child's school work as well as his relationships with other children."

Antiminth will be available as a caramel-flavored oral suspension which is non-staining and well-tolerated. Cure rates in clinical trials have run close to 100 per cent for pinworm (enterobius vermicularis) and from 85 to 100 per cent for roundworm (ascaris lumbricoides).

Pinworm is the most commonly diagnosed helminth infection in the United States, six times more common than roundworm. Most of the diagnoses of worm infections are made in children under 10 years old, but since it is common for a helminth infection to spread throughout a household, a prescription generally is written to include all family members.

It is estimated that the incidence of pinworm infection alone in the United States approximates 20 to 25 million cases a year, and that 75 to 80 per cent of these cases go untreated.

AMA, ANA Form National Commission

The American Medical Association and the American Nurses' Association have established a national commission to discuss and recommend changes in medical and nursing practice that will improve health care in the United States.

The 16-member National Joint Practice Commission, which has equal representation from the two professional groups, met in St. Louis Jan. 20-21.

The ultimate goal of the new AMA-ANA commission is to recommend to both professions necessary action which will encourage optimum working relationships and assure the best care of patients.

Areas to be examined by the new commission include current clinical practice, patient care procedures, new methods of providing care, and relationships with new categories of health care personnel.

It is expected that there will be counterpart committees of physician and nurse practitioners in every state to deal with these and related subjects.

MSMA Publishes RMP Pending Grants

The Board of Trustees has instructed the Editors of the JOURNAL MSMA to publish pending grant applications of the Regional Medical Program (P.L. 89-239) and other federal-state projects for the information of the membership.

The Mississippi Regional Medical Program, located at 880 Lakeland Drive in Jackson, was founded in 1967 with initial offices in the University Medical Center.

Regional Medical Programs throughout the U. S. were funded with the goal of improving patient care in areas of heart disease, cancer, stroke and related diseases. Recently the RMP's have shifted emphasis from demonstration, training, and continuing education with categorical emphasis to access, equitable distribution, and mechanisms for delivery with the modification having been brought about by administrative decision rather than changes in the law.

Pending grant applications to the Mississippi Regional Medical Program include:

—A three year staffing grant of $120,361.04 to establish a 10-bed Stroke Rehabilitation System at North Mississippi Medical Center in Tupelo. Target group: population of northeast Mississippi.

—One year funding of $87,380.00 to establish an Electrical Hazards Safety Program at the University of Mississippi Medical Center in Jackson under the direction of the Physical Plant Department. Target group: all hospitals in Mississippi. Purpose: patient safety and to develop a system of health care and increase technical competence in medical instrumentation.

—$108,180.00 funding for three year project to "Control Infections in Hospitals" under the direction of the UMC Department of Surgery.

—Two year funding of $53,075.00 for a research and demonstration project "Shared Management Engineering in Small Hospitals" to Mississippi State University Department of Industrial Engineering. Target area: statewide educational function.

—One year funding of $20,220.00 for "Preceptorship Training Program for Black Medical Students" by the Mississippi Medical and Surgical Society.

—First year funding of $162,865.00 for "University Hospital Comprehensive Dental Development Clinic" at University Medical Center in Jackson.

—Two year funding of $190,675.00 for developing "Pulmonary Therapy Programs for Community Hospitals" to Dr. Myra Tyler at University Medical Center.

—One year funding of $127,188.00 for "Feasibility Studies-State Health Statistics Center" for UMC Department of Preventive Medicine.

—$15,018.00 funding for "The Professional's Information and Referral Service" to St. Dominic-Jackson Mental Health Center.

—Fiscal year funding of $57,670.00 for "The Community Control of Hypertension in Holmes County, Miss." to the Milton Olive III Memorial Corporation.

—First year funding of $57,298.00 for "Patient and Staff Education in Selected Chronic Diseases—A Statewide Health Education Program" to the State Board of Health.

—Three year funding for "A Regional Center for Continuing and In-Service Education to Serve a Nine County Area (Claiborne, Copiah, Humphreys, Issaquena, Jefferson, Pike, Sharkey, Warren, and Yazoo)" to Mercy Hospital-Street Clinic in Vicksburg.

—One year funding of $41,827.00 for "Community Health Care Through Education to Provide Quality Care to the Mentally Retarded" to Ellisville State School which, by law, serves 37 counties in Southern Mississippi.

—One year funding of $47,125.00 for "Continuing Education to Help Health Care Providers Use Skills Effectively" to UMC and the Mississippi Postgraduate Institute in the Medical Sciences. Target: physicians, registered nurses, allied health professionals in the state of Mississippi.

—Budget of $151,453.00 for ambulatory patient services, training coordination and continuing education and public information for the development of "Area Health Education Centers" to James B. Moore, Ph.D. of the Mississippi Regional Medical Program.

—Three year funding of $372,905.00 for "Continuing Education in Maternity Care in Mississippi" to Dr. Donald Sherline and UMC Department of Obstetrics and Gynecology.

—Total funding of $268,320.00 for "Foster Home Care for Children with Medical Problems" to the Mississippi Department of Public Welfare.

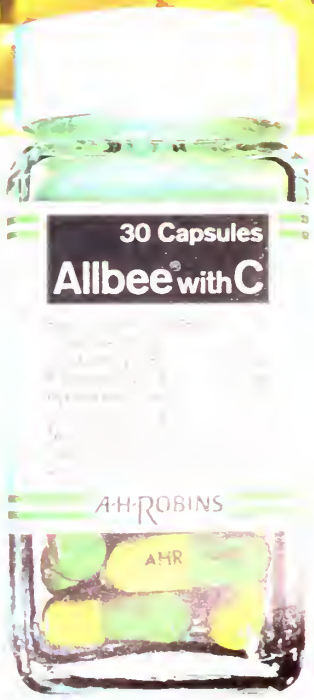
—Total funding of $228,718.80 for "A Model for Regional Rural Maternal Child Care" to S. Washington County Hospital in Hollandale.

—Three year funding of $247,505.00 for "The Mississippi Regional Newborn Care Program" to



2 ways to provide a month's therapeutic supply of Vitamin C: 180 lemons or 30 Allbee with C

As a source of ascorbic acid, the lemon really hits a high C (50 mg.). But your patient would still have to eat 180 lemons every month—6 a day—to get a therapeutic dose. And as the calypso singer puts it, "one hundred eighty lemons is impossible to eat." Fortunately, a bottle of 30 Allbee with C capsules (taken one capsule daily) supplies as much Vitamin C as all those lemons, plus full therapeutic amounts of the B-complex vitamins. For example, as much B_6 as two pounds of corn. Allbee with C is no lemon! This handy bottle of 30 capsules gives your patient a month's supply at a very reasonable cost. Also the economy size of 100. Available at pharmacies on your prescription or recommendation.



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Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.

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Dr. Alfred W. Brann, Jr., of the UMC Department of Pediatrics.

—One year funding of $46,848.00 for "Cervical Cancer Cytology Screening Application" to the State Board of Health. Three objectives: cancer screening of older women in state, early cancer detection, and achievement of quality cancer care. *Approved but never activated or funded.*

—Continuation application of one year funding of $141,380.00 for the UMC Stroke Care Demonstration Project.

—Continuation proposal for one year funding of $36,946.00 for "Emergency Nursing in Critical Illness," a postgraduate course for nursing personnel. Projected budget for the following year: $39,455.00.

The UMC Department of Preventive Medicine has applied to the HEW Public Health Service for a grant for "Development of the Mississippi Cooperative Health Statistics System." Robert L. Watson, D.V.M., would be coordinator of the project.

AABB, ISBT Hold Joint Congress

The 1972 meetings of the American Association of Blood Banks (AABB) and the International Society of Blood Transfusion (ISBT) will be held as a joint International Transfusion Congress, Aug. 27-Sept. 2 in Washington, D. C.

More than 4,000 physicians, scientists, technologists, health officials, and blood bank administrators from all parts of the world are expected at the Sheraton-Park and Shoreham Hotels, host accommodations for the six-day session. This will be the 25th annual meeting for the AABB and the 13th Congress for the ISBT.

Plenary sessions will be devoted to hemostasis, immunogenetics, immunochemistry, cellular metabolism, and transplantation. Other scientific sessions will discuss hepatitis, fractionation, automation, oxygen transport, rheology, genetics, blood and serum groups, transfusion reactions, red cell metabolism, cryobiology, coagulation, plasmapheresis, separation technics, immunoglobulins, and data processing.

Blood bank administrators will have the opportunity to interchange views and sharpen their skills in the areas of donor motivation, donor recruitment technics, personnel management, public information and communication, blood inventory systems, blood bank records, blood bank laws and legislative activities, and fiscal policies.

"Problems Encountered in Pre-Transfusion Tests" is the topic of the AABB's annual Pre-convention Technical Seminar, Sunday, Aug. 27. In addition, five concurrent pre-meeting technical workshops will convene Friday, Aug. 25 and Saturday, Aug. 26. Practical laboratory subjects will be "Detection of Fetomaternal Hemorrhage" and "Applied Immunology I." "Are You Always Ready for Inspection?," "Transfusion Problems in Special Patients," and "Transfusion Reactions" will be offered for in-depth discussion session registrants.

Washington physicians currently head both organizations. Dr. William G. Battaile, pathologist at Sibley Memorial Hospital, is president of the AABB. ISBT president is Dr. Tibor J. Greenwalt, medical director of the American National Red Cross Blood Program.

Both are nonprofit medical organizations dedicated to voluntarism and high standards of transfusion practices. Some individuals and institutions belong to both, but the two membership rosters are largely nonduplicating. The AABB membership, representing all states and 35 countries, totals approximately 5,300 members: 1,300 institutional, 200 associate institutional, and 3,800 individual.

The AABB meets annually to discuss scientific, technical, and administrative aspects of blood banking. It is the world's largest organization devoted exclusively to blood banking and transfusion services, and its institutional members provide over 5,500,000 units of blood and components annually.

The ISBT has some 600 individual and 95 corporate members in 65 countries. The latter includes national transfusion societies of France, Italy, Japan, Ireland, Spain, East Germany, Mexico, Poland, Norway, Uraguay, and Sweden, and also the Red Cross or Red Crescent Societies of a score of countries.

Another ISBT corporate member is the International Federation of Organizations of Blood Donors, comprised of volunteer groups in Brazil, Venezuela, Cameroon, Austria, Belgium, France, Luxemburg, Monaco, San Marino, and Spain.

The 1972 Washington Congress is the ISBT's first to be held in the western hemisphere since its 1962 session in Mexico City. The Society now meets tri-annually. It convened in Sydney in 1966 and last met in Moscow in 1969.

Pre-meeting headquarters for the Transfusion Congress will be Suite 401, 915-19th Street, N.W., Washington, D. C. 20006, office of the AABB in the nation's Capital. Abstracts of papers for presentation for the 1972 International Transfusion Congress may be submitted until March 31, 1972.

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Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

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Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures nece for optimal control with insulin are also necessary with Or The patient on Orinase must be fully instructed: abo nature of his disease; how to prevent and detect complica how to control his condition; not to neglect dietary restric develop a careless attitude or disregard instructions relat body weight, exercise, personal hygiene, and avoidance fection; how to recognize and counteract impending hyp cemia; how and when to test for glycosuria and ketonuria to use insulin; and to report to the physician immediately does not feel as well as usual.

Caution, very close observation, and careful adjustm dose are necessary when: insulin is withdrawn during th period in order to avoid ketosis, acidosis, and coma; th diuretics are administered which may result in aggravati diabetic state and increased tolbutamide requirement, t rary loss of control, or even secondary failure; treating p with impaired hepatic and/or renal function and debilitated nourished, or semistarved patients in order to avoid severe glycemia which may require corrective therapy over s days; and treating patients with severe trauma, infection, gical procedures where temporary return to insulin or ad of insulin may be necessary. Response to tolbutamide is ished in patients receiving therapy with beta blocking a

As some diabetics are not suitable candidates, it is ess that the physician familiarize himself with the indications, of application, and selection of patients for therapy.

Patients must be under continuous medical supervision during the initial test period should communicate with the

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daily, and during the first month report at least once weekly hysical examination and definitive evaluation. After a month, inations are recommended monthly or as indicated. Ap-nce of ketonuria, increase in glycosuria, unsatisfactory ring or persistent elevation of blood sugar, or failure to n and hold clinical improvement indicate nonresponsive-to Orinase (tolbutamide). Orinase does not obviate need for taining standard diet regulation. Uncooperative patients ld be considered unsuitable for therapy. Prescriptions should filled only on specific instruction of physician. In treating asymptomatic diabetic patients with abnormal glucose nce, glucose tolerance tests should be obtained at three-t-month intervals. Orinase is not an oral insulin or a substi-for insulin and must not be used as sole therapy in juvenile tes or in diabetes complicated by acidosis or coma where in is indispensable.

henformin is prescribed in combination with Orinase, ap-riate package literature should be consulted.

verse Reactions: Severe hypoglycemia, though uncommon, occur and may mimic acute neurologic disorders such as ɔral thrombosis. Certain factors such as hepatic and renal se, malnutrition, advanced age, alcohol ingestion, and nal and pituitary insufficiency may predispose to hypogly-a and certain drugs such as insulin, phenformin, sulfona-s, oxyphenbutazone, salicylates, probenecid, monamine se inhibitors, phenylbutazone, bishydroxycoumarin, and yramidol may prolong or enhance the action of Orinase and ase risk of hypoglycemia. Orinase long-term therapy has reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

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Mental Health and Mental Retardation. The association has supported this legislation, which has the overall objectives of extending care for mental health and retardation.

The chairman of the committee, Dr. John J. Head of Jackson, resigned because of personal health and his retirement. The newly appointed chairman is Dr. Jerry M. Ross of Whitfield.

Committee on Occupational Health. The committee, charged with the study of all aspects of occupational health, continues to pursue an interest of a suitable and legal base for Workmen's Compensation in Mississippi. Presently there are numerous bills pending before the 1972 Regular Session of the Legislature concerning Workmen's Compensation.

A major program of this committee is development of guides for occupational health programs in small plants in Mississippi and individual members continue to prepare editorials and scientific articles for publication in the JOURNAL.

At the time of preparation of this report, legislation is pending on bringing the state's statute within line with the Federal standard of the Occupational Health and Safety Act.

Dr. George D. Purvis of Jackson has submitted his resignation as chairman after serving 15 years. Your council commends his exercise of leadership and able representation before local, state, and national groups. The new chairman is Dr. George H. Martin, of Vicksburg.

Committee on Nursing (ad hoc). The committee has been intensely devoted to the establishment of a MNA-MSMA Joint Practice Committee in Mississippi during the 1971-72 association year. At the Oct. 14, 1971, meeting of the Council on Medical Service, our Committee on Nursing was given authorization to appoint physician members to service on a Joint Practice Committee in conjunction with the Mississippi Nurses Association. Our committee viewed the following problems which relate specifically to the matter of role function that must be taken up by a Joint Practice Committee:

1) The utilization of nurses in providing health care. Many studies indicate that nurses spend 50 to 75 per cent of their time in non-nursing functions. And this proves to be a major source of dissatisfaction.

2) The development of a career perspective in nursing practice. Too frequently, the opportunities for advancement in nursing lead away from the patient into nursing administration or education. There must be increased incentive for providing care.

3) The expansion of the role of nurses to ensure that their talents and capacities are fully used and challenged. Too many individuals feel that they are not encouraged to apply their education to the limits of their ability—and in answer to the needs of patients.

The first meeting of the MNA-Joint Practice Committee was at Jackson on Jan. 26, 1972, at which time Dr. Tom H. Mitchell was elected chairman. The committee agreed that its primary purpose should be in exploring means by which the role of the R.N. may be expanded so as to utilize fully their skills in patient care in an atmosphere that provides challenge and stimulus for continued growth and development of these skills.

The committee conducted extensive activities in 1971 with reference to mandatory licensure for nurses. The measure was passed by the Regular Session, and the association's policy position, adopted at the 102nd Annual Session was:

1) The association supports mandatory licensure of nurses in principle, reserving the prerogative of making further changes and improvement and further reserving to the Board of Trustees final approval.

The committee chairman has served as the association's representative on the nurse education advisory body to the Board of Trustees of Institutions of Higher Learning. The advisory committee reports progress in construction of new facilities and improvement of facilities in nursing schools in the state.

The committee takes the position that there should be no further licensure of allied health professions pending study and clarification of their respective roles in health care delivery. This is the position of the American Medical and American Hospital associations.

Active liaison is maintained with the Mississippi Nurses Association, and regular joint meetings with our committee are conducted.

Committee on College Health (ad hoc). The Council on Medical Service authorized the appointment of the committee at its Oct. 14, 1971 meeting. The committee is charged with the responsibility of stimulating interest in health programs and improvement of health facilities on the college campuses in Mississippi.

The committee has scheduled an organizational meeting this spring. Dr. John C. Longest, Director of Student Health Services, Mississippi State University, is chairman of the committee. There are seven members and five consultants of the committee.

Family Planning (ad hoc). The Council on Medical Service authorized the appointment of the committee at its Oct. 14, 1971 meeting. The


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committee is charged with pursuing all aspects of the activities outlined in the sections entitled, "Health, Maternal and Child Care," and "Social Factors, Education for Family Life," of the study *The Needs of Children in Mississippi.*

The committee consists of three members. A chairman has not been selected.

Other Council Activities. Some small but encouraging progress is being made in placing practicing physicians as voting members of hospital governing boards, despite opposition to this by many hospitals. This useful and important means of liaison with the medical staff bears the endorsement of the Joint Commission on Accreditation of Hospitals, the American Medical Association, the American College of Surgeons and most major national specialty societies, our own state medical association and most of our sister state medical associations.

We continue educational efforts and programs designed to upgrade emergency medical service. During the year, the helicopter demonstration project has shown great promise, as reported in the JOURNAL. Staffing of hospital emergency rooms with physicians has greatly extended these services, and we endorse the various approved postgraduate and continuing education programs for physicians, nurses, and other allied professional personnel in this area as being vital to improvement of emergency medical services. There is a salutary trend in legislative development on standards for ambulance and driver standards.

We met prior to the implementation of Title XIX Medicaid with state officials of the Medicaid Commission, and we have carefully monitored program development. Oversight of program development remained a primary responsibility of the Board of Trustees during the year, because of the Extraordinary Session of the Legislature to shape the program. Your council, however, is prepared to assume oversight of the ongoing program when and if the Board and House of Delegates so direct, as was the case in Medicare.

The council expresses appreciation to its several committees, some of which are among the most active bodies of the association, and to our colleagues on the Board of Trustees who have worked closely with us, giving understanding support and guidance to our problems and programs. The council emphasizes to the House of Delegates that its area of responsibility and concern, the actual practice of medicine and delivery of care, must have support from all members and adequate staff in our Executive Office. We repledge our best efforts in carrying out our work.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Organization and Duties. The Council on Scientific Assembly is a constitutional body of the House of Delegates, charged with the responsibility of planning the annual session of the association to include all scientific activities, programming, and the scheduling of annual session events. The council membership consists of the chairmen and secretaries of the seven scientific sections and the secretary-treasurer of the association, a total of 15 members.

104th Annual Session. Planning and organization of the 104th Annual Session was initiated in the summer of 1971. The council has altered the format followed in former years to incorporate general sessions on socioeconomic topics to try to stimulate lagging attendance at the scientific programs. Tuesday and Wednesday mornings will feature programs on peer review and medical care foundations, and professional liability and corporations, respectively. The seven scientific sections will be holding combined meetings this year on three afternoons. Meeting jointly will be surgery and ob-gyn; medicine, family practice, and preventive medicine; pediatrics and EENT. To the maximum possible extent, conflicts in schedules and programming have been eliminated, although as a practical matter, such total elimination is not possible.

At the request of the Board of Trustees, the council asked that the specialty societies assume responsibility for the scientific program. Section chairmen agreed to consult their respective specialty societies as to their willingness to do this for the 1972 annual session only. For a number of specialty representatives, finances appeared to be a problem.

We are gratified that at the present annual session, 15 specialty groups have related or concurrent meetings with us. Three medical alumni groups have fraternal and social occasions, and various nonscientific but medically related bodies will meet during May 7-11. We continue to believe that providing for and encouraging these related meetings increases the attractiveness of the annual session to the membership and benefits attendance. We are glad to continue support of the Woman's Auxiliary and its concurrent annual session with us.

The mid-day scientific motion picture programs have been discontinued because of poor attendance. The council is proud to present for the first time this year 12 hours of lectures, papers and top medical presentations in all 20 specialties on special inhouse television at the Sheraton-Biloxi. Registrants will be able to view nightly telecasts

in their rooms on channel 2 during the annual session. Taped from recent AMA conventions, the presentations are made possible through the AMA Communications Division and are sponsored by Roche Laboratories. We are gratified with the presentations in the scientific exhibit, and we urge every member and guest to view these and the technical exhibits.

Technical Exhibit. Your council notes that ethical pharmaceutical firms, suppliers, and others eligible for purchase of space in our Technical Exhibit are declining our invitation to participate in growing numbers. This is not confined to Mississippi, because other state medical associations, major state specialty societies, and national organizations are having the same experience.

Harsh federal drug legislation, changing concepts in marketing, and tighter budgets for advertising are taking a toll of technical exhibit revenues. We have circularized more potential exhibitors than ever before, and we continue to do all things possible to increase this participation.

Annual Session Funding. The Council on Budget and Finance and the Board of Trustees have requested your council to make the annual session financially self-sustaining. The Board has eliminated the $300 cash honorarium in the Scientific Exhibit and restored the Scientific Achievement Award, a bronze medallion especially designed for the association. Other economy measures have been instituted, including deleting the services of the full-time press director, Mr. Bill Keith of Jackson. An association-wide cocktail party will again be conducted which includes no dinner or entertainment.

The management of the annual session is being accorded the closest attention by your council and the executive staff to see that the present annual session will be financially self-sustaining.

Headquarters Hotel. The annual session will be held at the Sheraton-Biloxi for the second year. The council conducted a critique of the hotel's services after the 103rd annual session and on overall performance gave the Sheraton-Biloxi a high mark. A great number of spoken and written compliments were received after last year's meeting. Problems were noted with the electrical service, air conditioning, telephone service, exhibit handling and janitor service, but the hotel management was informed and has agreed to try to improve these deficits. We believe that the hotel will improve as the new staff gains experience.

Expression of the Council. Your Council on Scientific Assembly is grateful for the support, cooperation, and assistance we have received in planning the 104th Annual Session.

Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is additionally charged with the duties and responsibilities prescribed by law for directors of corporations. In the discharge of these duties, the Board shall have conducted six meetings in 1971-72 consisting of 12 meeting days since the 103rd Annual Session.

Seven officers sit with the Board of Trustees at all meetings. They are the president, president-elect, secretary-treasurer, speaker, vice speaker, and the two AMA delegates. The Board is assisted in its work by support of the executive staff. All 1971-72 meetings were conducted at Jackson.

This annual report includes actions on matters referred to the Board by the House of Delegates and items relating to management and policy functions which are among the Board's responsibilities.

Referrals from the House of Delegates. Matters referred to the Board of Trustees at the 103rd Annual Session and actions by the House requiring further actions by the Board include:

(a) *Resolution No. 2.* This resolution provides for the establishment of an Office of State Medical Examiner who shall be a qualified forensic pathologist. The resolution incorporates the office into the faculty structure of the University of Mississippi School of Medicine where the medical examiner may engage in teaching as well as in performance of the duties of state medical examiner. A suitable bill was prepared and introduced in the 1972 Regular Session of the Legislature and is pending before the Mississippi House of Representatives at the time of this report. The bill would, in addition to establishing the Office of State Medical Examiner, establish qualifications for appointment, prescribe duties and authorities, authorize performance of autopsy, and provide for records and reports.

(b) *Resolution No. 3.* This resolution calls for enactment of legislation providing for mandatory licensure of child care centers and day care facilities in Mississippi both as to environmental health and safety standards. A bill was drawn up and introduced in the 1972 Regular Session of the Legislature but it died in the Senate Committee on Public Health and Welfare. However, a similar bill has passed both chambers and has been signed into law by the Governor.

(c) *Resolution No. 5.* This resolution opposes the policy of the Food and Drug Administration to remove from the physician's therapeutic armamentarium combination ingredient drug products, thereby denying him and his patient the convenience and economy of many proven products. The

resolution proposes that this policy by the Food and Drug Administration will increase the costs of drugs to patients and will waste research and clinical manpower, facilities, and expense in satisfying these restrictive requirements. With many other state medical associations and national organizations taking the same position, including a sharp protest by the American Medical Association, the FDA receded from its inflexible position, and the entire issue was reviewed. Now regulations have been issued which are far more reasonable, less arbitrary, and more generally acceptable to the practicing profession.

(d) *Resolution No. 6.* This resolution approves the creation of a full academic and clinical Department of Family Practice at the University of Mississippi School of Medicine as well as appropriate residencies in family practice for training board-eligible physicians in this specilty. The University of Mississippi School of Medicine has created a Division of Family Medicine whose function it will be to direct emphasis on comprehensive family health care. Aim is to help meet the critical instate health manpower shortage through the "family doctor" concept.

(e) *Resolution No. 7.* This resolution calls for an all-out effort to publicize the significance and ramification of the Emergency Personnel Act of 1970. The resolution encourages action of public and private agencies in Mississippi to make rapid efforts to determine areas at both the state and county levels in need of emergency health personnel and to assure that the state derives maximum possible benefit from the act.

(f) *Resolution No. 8.* This resolution sponsors legislation for the authorization of the State Board of Health to purchase adequate professional liability insurance to protect the public health physician. The resolution is based upon a court decision in New York where the state was held to have the responsibility to defend, indemnify, and hold harmless a public health physician who is sued over a matter arising out of the performance of his duties. Informal discussions have been conducted with Dr. Hugh B. Cottrell in this connection. The St. Paul Companies have furnished this coverage at a nominal price for all public health physicians in or under the State Board of Health.

(g) *Resolution No. 9.* This resolution urges that each component medical society establish a committee on medicine and religion which will be, in turn, supported and assisted by the state medical association's Committee on Medicine and Religion. The MSMA Committee on Medicine and Religion has pledged itself to contacting an interested physician in each component medical society. The chairman, Dr. John M. Alford, Jr., of Greenwood, has worked diligently in expanding the medicine and religion program.

Nominations for the State Board of Health. Vacancies on three Public Health Districts occurred in 1971, and it was therefore necessary for the House of Delegates to make nominations to the Governor at the 103rd Annual Session.

The following nominations were sent to Gov. John B. Williams for his consideration:

Public Health District 6:
- Joseph G. McKinnon, M.D., Hattiesburg
- William E. Weems, M.D., Laurel
- Bedford F. Floyd, Jr., M.D., Gulfport

Public Health District 7:
- G. Swink Hicks, M.D., Natchez
- W. Moncure Dabney, M.D., Crystal Springs
- R. J. Field, Jr., M.D., Centreville

Public Health District 8:
- Wilfred Q. Cole, Jr., M.D., Jackson
- E. L. Whitfield, M.D., Florence
- H. C. Ricks, Sr., M.D., Jackson

While the nominations were in Gov. William's office, Dr. R. J. Field, Jr., of Centreville, withdrew his name. Gov. Williams went out of office without acting on the nominations; therefore, the Board of Trustees instructed the Executive Office to send another list of the names to Gov. William L. Waller for his consideration. To date, Gov. Waller has not acted upon these nominations.

CHAMPUS. The association concluded its 15th year as fiscal administrator for the CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) program in Mississippi. The operation continues to grow with an increase in claims volume of 15 per cent and a dollar volume increase of 20 per cent in 1971, and it is a $2 million operation. Compensation to physicians for professional services is made under the concept of usual and customary fees under medical peer control.

Less than 3 per cent of claims received are such that they are reviewed by the seven-member review committee. Payment to physicians and others is made weekly. Fees submitted by Mississippi physicians who participate in the CHAMPUS program are the basis by which a usual and customary fee concept is established.

Journal MSMA. The JOURNAL has concluded its 12th consecutive year of continuous publication with the 144th issue in December 1971. It remains the largest single association-sponsored project and is a team effort among the Editors, Committee on Publications, and JOURNAL staff. The thrust of the JOURNAL continues solidly around Mississippi medicine, the association, and the Mississippi physician.

Total pages and advertising pages and revenues

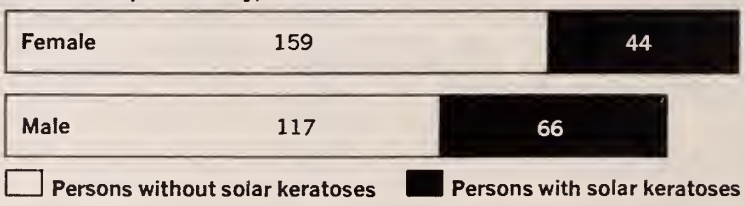
What it means to live and work i Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



olar, actinic, senile keratoses

alled by many names, the typical lesion is flat slightly elevated, brownish or reddish in olor, papular, dry, adherent, rough, sharply efined; usually multiple lesions, chiefly on xposed portions of the skin.

equence/selectivity of response

rythema in areas of lesions may begin after veral days of therapy; height of reaction nly in affected areas)* usually occurs within o weeks, declining after discontinuation of erapy. Since this response is so predictable, sions that do not respond should be biopsied rule out the presence of a frank neoplasm.

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smetic results are highly favorable. Incince of scarring is low—important with multie facial lesions. Efudex should be applied th care near the eyes, nose and mouth.

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Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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increased over 1970, but printing costs continued to rise. The staff has worked with the Ovid Bell Press to achieve every possible economy including a change of paper, careful book design, and sparing use of color.

Among the services the JOURNAL contributes to the association by publishing and absorbing costs are: complete program of the 104th Annual Session, Handbook and proceedings of the House of Delegates, Constitution and By-Laws, publication of special issues with reprints, regular listing of component medical societies officers and meeting dates.

The Board expresses appreciation to the Editors, committee and staff in the production of this vital membership service.

Insurance Programs. There are approximately 2,100 contracts among 1,450 members in the association's two major group insurance programs. In addition to the Blue Cross hospitalization group, the association sponsors general accident, disability, health, and life programs with the Continental Companies and a professional liability insurance program with the St. Paul Companies. The association handles no premium collections nor processes claims. The Board takes the position that any profits or payments which might thereby accrue to the association should be passed along to participating members in the form of lower premiums or greater benefits.

About 1,400 contracts are in force in several Continental groups which are administered by the Thomas Yates Co. of Jackson, and the participants constitute more than 40 per cent of the membership.

There are about 900 participants in the St. Paul professional liability insurance program. We enjoy the fourth lowest premium rate in the United States. The St. Paul Company who has administered this program for 10 years makes available claim review to any member against whom a claim or suit is threatened or initiated. The Board commends this program to physicians, pointing out its substantial monetary benefit in savings to members. The professional liability market has become a critical matter for most American physicians.

The Board urgently recommends that each member exercise care and diligence in securing this vitally necessary coverage and that threatened or instituted litigation be brought before the Board. We are not immune in Mississippi from the crisis in liability litigation which has come to so many states.

Mississippi Health Expo I. In early 1971, the thought of planning a large "health exposition" in Mississippi through the sponsorship of participating health oriented organizations was seriously considered by Mrs. Guy T. Gillespie, Jr., of Jackson. Mrs. Gillespie won the support of many community leaders and gained additional support through the interest of several organizations. The first meeting for the project was held on March 30, which was attended by some 48 people representing 27 organizations. It was at this meeting that the planning group announced the project's name, Mississippi Health Expo I; the date, October 1-3, 1971; and the place, Mississippi State Coliseum. The major emphasis would be on health education, recruitment in health careers, and disease detection screening. The format would include mechanical and electrical exhibits, demonstrations, lectures, training sessions, and films and entertainment.

At the April 8-9, 1971, meeting of the MSMA Board of Trustees, Mrs. Gillespie presented the project to the Board requesting the Board's approval and sponsorship. The Board endorsed and agreed to sponsor the Mississippi Health Expo I and authorized the appointment of an *Ad Hoc* Committee on Health Expo to work with others for incorporation, policy development, program content, and exhibits. The physicians appointed by the Board as members of the *ad hoc* committee were: Drs. C. G. Sutherland, Raymond F. Grenfell, Jim G. Hendrick, and Raymond S. Martin, Jr., all of Jackson. The state medical association's House of Delegates at the 103rd Annual Session also approved the proposed project and recommended that the Board of Trustees work with the officials of the Mississippi Health Expo I to bring it into being and furnish sponsorship of our association.

On June 9, 1971, Governor John Bell Williams met with members of the executive committee and the Committee on Health Expo to discuss the project. In the Governor's discussion, he endorsed Expo I as an excellent project for Mississippians and tentatively accepted the invitation for the opening.

On June 16, it was announced that Expo I was organized as a non-profit corporation without shares or stockholders; and that there would be five incorporators from the 31 participating organizations: Mississippi State Medical Association, Regional Medical Program of the University Medical Center, Mississippi State Board of Health, Mississippi Hospital Association, and First National Bank.

Mississippi Health Expo I opened with a state ambulance helicopter landing with hundreds of school children, teenagers, and other guests present for the official opening. Landing in the helicopter were Governor John Bell Williams, and Dr.

Arthur E. Brown of Columbus, Mississippi State Medical Association president. A "grand tour" consisting of the Governor, Dr. Brown, Dr. Raymond S. Martin, Jr., Dr. Robert E. Blount, and Mrs. Guy T. Gillespie was guided through the coliseum. The three day period provided those in attendance a chance to witness 100 exhibits and demonstrations involving more than $250,000 in production expense and including a special speaker each day of event. Special speakers included Dr. Robert A. Marston of Bethesda, Maryland, Director of National Institutes of Health and former dean of the University Medical School. Dr. Paul Dudley White, noted cardiologist, and Dr. James Q. Simmons, medical director of the National Multiple Sclerosis Society. At its conclusion, Expo I had attracted 50,000 persons and was represented by over 50 organizations which delivered countless hours of work and planning beginning in the late spring.

MECO. The Medical Education Community Orientation program consisting of ten weeks in a hospital environment with a structured curriculum was approved by the Board of Trustees to continue for the summer of 1972. It was developed as a joint project of the state medical association, state hospital association, and Mississippi Chapter of the Student American Medical Association. The students themselves have performed much of the necessary correspondence, administrative work, and all matching of applicants with hospital vacancies.

In confirming support of the program, the Board requested that summer externs be assigned to a specific staff physician in each participating hospital.

It was also agreed that some agreement should be signed by the extern with the hospital, assuring his participation in the program once he has been selected.

Participating students, staff physicians and hospital administrators have felt the program was worthwhile as evidenced by the 33 hospitals participating in 1972 in contrast to 24 last year.

Budget and Finance. The 1971-72 association year was the first year that the Council on Budget and Finance consisted of five members, providing a broader base of financial management.

The council met in November 1971 and prepared the 1972 budget which was presented to the Board of Trustees in accordance with established procedures. The fiscal program shall have been reviewed by the Board in April, and the budget will be presented to the House of Delegates in the customary manner.

Both the Council on Budget and Finance and the Board of Trustees are grateful for the cooperation of the House of Delegates.

Legislative Program. In 1971, the House of Delegates directed, in response to a special report of the Board and the address of our then-president, Dr. Paul S. Brumby, that a new and intensive legislative program be developed and implemented. This consisted of continued production of the weekly legislative newsletter, monthly meetings of the Council on Legislation during sessions of the legislature, regular meetings with key committees of the House of Representatives and Senate, daily staff representation at the Capitol, continuation of the Emergency Medical Care Unit at the Capitol, and doctor-to-legislator communications.

This program has been implemented, and the "Mississippi Medical Legislative Report," a four-page weekly newsletter, has been furnished by first class mail to all members. The Council on Legislation initiated monthly meetings during which conferences are held with the public health committees of both chambers. The association has presented testimony, both oral and written, on a number of occasions, and our executives have represented us daily at the Capitol. The Board commends the Council on Legislation for developing and implementing this program.

The state medical association had a six point legislative program for the 1972 Regular Session: (1) State Medical Examiner Act, (2) licensure of child day care facilities, (3) training program in family practice at UMC, (4) support of capital improvement program for universities and UMC, (5) lowering age of consent to give blood from 21 to 18, and (6) to permit therapeutic abortion for medical reasons.

Mississippi Foundation for Medical Care. At the 103rd Annual Session in Biloxi, May 3-6, 1971, the Board of Trustees was empowered by the House of Delegates to create and establish the Mississippi Foundation for Medical Care.

The MFMC was incorporated on the sixth day of July, 1971, and was organized on the 25th day of August at 735 Riverside Drive, Jackson, Mississippi.

The MFMC is a wholly-owned, nonprofit, voluntary corporation controlled by the Mississippi State Medical Association. As set forth in the By-Laws, it is governed by a Board of Directors, not less than nine nor more than 12 in number. Currently, there are ten physician-members serving on the Board of Directors. As is done in the medical association, no director may serve more than three consecutive terms of three years each. The board chairman is the real and acknowledged head of the foundation, and his fellow physician-

officers are the vice chairman and secretary-treasurer.

The foundation's executive staff consists of a president and a vice president-comptroller. The directors may appoint such other subordinate officers as necessity may require. Provision is made in the By-Laws for committees which are named by the Board of Directors.

As is true with all other medical care foundations, the Mississippi organization has two classifications of membership, administrative and participating.

Administrative members are the Trustees of the state medical association, and in them are vested two important authorities: The Board of Trustees appoints the foundation's Board of Directors, assuring that the will of the medical association extends into every organizational and operational aspect of the foundation. The Trustees may also amend the foundation's By-Laws, another measure of physician control.

Participating members are those physicians, either members of the state medical association or who are fully qualified for membership, who voluntarily apply for membership to avail themselves of foundation benefits. For 1971-72, no dues are charged for participating membership.

The MFMC will conduct an annual membership meeting in conjunction with the 104th Annual Session at which all participating members may vote. A full stewardship accounting will be made to the foundation membership.

For the first time this year the association is offering plenary sessions on socioeconomic topics of interest in addition to the regular scientific sections. On Tuesday, May 9, there will be a plenary session on the Mississippi Foundation for Medical Care and peer review at the Sheraton-Biloxi.

The Board of Directors of the foundation expresses their appreciation to the House of Delegates for supporting and assisting in the implementation of the foundation.

Experimental Medical Care Review Organization. The National Center for Health Services Research and Development (NCHSRD of HEW) has awarded the Mississippi State Medical Association a grant of $369,000 to develop a physician-sponsored method of "evaluating quality of medical care." The funding is effective June 30, 1971, through May 31, 1973. MSMA's only official obligation is to publish findings and results. The following paragraphs present a brief summary of the project, denoting the status as of March 1, 1972.

A. Staffing and Physical Facilities. The Mississippi EMCRO staff consists of five (5) full-time

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Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis* and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully correlated with bacteriologic and clinical response. When a patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture medium. Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents, including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level. Toxic adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, somnia. *Miscellaneous reactions:* Drug fever, chills, nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarity to some goitrogens, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

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personnel; director, secretary, two senior review technicians, one review technician. Physical facilities are located in the headquarters building of Mississippi State Medical Association at 735 Riverside Drive, Jackson.

B. Establishment of Specialty Panels. The respective presidents of the following Mississippi component specialty societies have provided three member panels of physician specialists to aid in development of medical criteria in their respective specialty area:

(1) Mississippi Society of Anesthesiologists.
(2) Mississippi EENT Association (ophthalmology and otolaryngology).
(3) Mississippi Academy of General Practice.
(4) Mississippi Society of Internal Medicine.
(5) Mississippi Obstetrical and Gynecological Society.
(6) Mississippi Orthopaedic Society.
(7) Mississippi Association of Pathologists.
(8) Mississippi Chapter, American Academy of Pediatrics.
(9) Mississippi Psychiatric Association.
(10) Mississippi Radiological Society.
(11) Mississippi Chapter, American College of Surgeons.
(12) Mississippi Urological Association.

C. Development of Criteria. Inpatient criteria have been developed by the above mentioned specialty panels. Composite criteria received to-date represent approximately 70 diagnoses. Criteria include considerations of appropriateness of hospital admission, appropriateness of services received while in the hospital, and appropriateness of the length of hospital stay. The criteria are in a format suitable for publishing.

D. Development of Computer Software. Software has been developed for the purpose of evaluating actual hospital discharge cases against the specialty-panel-prepared criteria. The software has been noted by both government and private sector sources as being unique in its capability of combining sophisticated review methodology with easily understandable narrative reports.

E. Leasing of Computer Hardware. An IBM 360/22 32K mainframe, two tape drives, three disk drives, card reader, card punch, and an optical mark page reader have been leased from the IBM Corporation and are being effectively used in conjunction with the above-mentioned software.

F. Selection of Review Physicians. Approximately five review physicians have been provided by each of Mississippi's 18 component medical societies. Each of these 90 review physicians has indicated agreement with the goals and methodology of the Mississippi EMCRO Peer Review system.

G. Active Peer Review. Items A. through F. have been successfully incorporated to provide true objective peer review of inpatient discharge cases from eight participating hospitals. The program has received enthusiastic verbal support from such varied sources as Medicare, Medicaid, JCAH, hospital administrators, and most significantly, from the Mississippi physicians whose practices of medicine are being reviewed.

H. Distribution of Educational Results. Educational results of the EMCRO program are being distributed on a weekly basis to the approximate 1700 physicians and 128 hospitals of Mississippi through the co-operative efforts of the Mississippi Hospital Association (MHA). Results contain both quality and cost comparisons and are distributed by MHA as a service to its membership at no cost to the EMCRO program.

As evidence of our competence and accomplishments, MSMA has been honored to have the director of the grant-awarding organization (National Center for Health Services Research and Development) visit us personally to review our EMCRO activities. As a result of Dr. Paul J. Sanazaro's visit, an EMCRO workshop was held in Jackson on February 21-22, 1972, enabling the Mississippi EMCRO to demonstrate its capabilities to all other national EMCRO organizations. The workshop was favorably received, lending credit to the National Center as coordinators and MSMA as host. It was a unique opportunity to proudly exhibit the image of medicine in Mississippi and to equally proudly exhibit a segment of Mississippi to the nation.

AMPAC. With the new MSMA computerized billing service for dues, AMPAC (American Medical Political Action Committee) has gained some 700 members for 1971. At the AMA-AMPAC Public Affairs Workshop held in Washington, D.C., the association won two first place and one third place membership awards. Mississippi won first in two categories: most dollars per physician and ratio of members to potential. The third place award was in all-events competition.

Appointments. Under the provisions of Section 1, Chapter VII, By-Laws of the association, the appointive powers are vested in the president. During the 1971-72 association year, President Brown made the following appointment which has the endorsement of the Board of Trustees.

(a) *Board of Trustees.* Following the resignation of Dr. James L. Royals of Jackson, District 5, Dr. Carl G. Evers of Jackson, District 5, was appointed to serve the unexpired term through 1974.

Organization of the Board. One new Trustee, Dr. Paul B. Brumby of Lexington, District 4, was welcomed to the Board during the 1971-72 year.

Officers of the Board during the year are Drs. J. T. Davis of Corinth, chairman; Everett Crawford of Tylertown, vice chairman; and James O. Gilmore of Oxford, secretary.

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Index to Advertisers

American Medical Association 182B

Burroughs Wellcome and Co. 8

Campbell Soup Company 150A

Eaton Laboratories 12

Geigy Pharmaceuticals 130A

Hill Crest Hospital 11

Kay Surgical, Inc. 19

Eli Lilly and Company front cover, 18

Merck, Sharp and Dohme 6, 7, 154A, 154B

Merrell-National Laboratories 162A, 162B

Pharmaceutical Manufacturers Association 165, 166, 167

Wm. P. Poythress and Company 170A, 170B

A. H. Robins Company, Inc. 178A, 178B

Roche Laboratories second cover, 3, 130B, 130C, 138A, 138B, 138C, 186, 187, 190, 191, fourth cover

J. B. Roerig and Company 16, 17, 138D

Julius Schmid 14, 15

G. D. Searle Company 150B, 150C, 150D

Smith, Kline and French Laboratories 130D

Stuart Pharmaceuticals 174A

The Upjohn Company 108, 10C, 10D, 180, 181

Warner-Chilcott Laboratories 10, 10A

Winthrop Laboratories 174B, 174C, 174D, 182A

Woodward Academy 4

Thomas Yates and Company third cover

IN CONCLUSION

At least 10,000 malpractice suits will be filed this year against MDs and hospitals, said Dr. George M. Saypol, N.Y. Co. Medical Society president in testimony before U.S. Commisssion on Medical Malpractic He said N.Y. hospitals add up to $2.50 a day to patient's bill to pa for malpractice insurance. Commission heard that liability premiums have risen 219% since 1966 and that survey of N.Y. hospitals showed liability coverage tab rose $131 a bed in 1969 to $220 in 1970.

In a suit filed in 1970 before the U.S. Court of Claims, Williams & Wilkins has charged the National Institutes of Health and the Nation Library of Medicine with infringing on its copyrights every time som one makes a copy of a journal article. Although librarians acknowle that no library makes money on Xeroxing, they concede that photodupl cation is practically indispensable to an efficient medical informat system. Suit should come up in next couple of months, say observers

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Anyone who regularly consumes 3 or 4 alcoholic drinks a day runs ris of heart damage, Dr. George E. Burch, Tulane chairman of medicine, t recent meeting of American College of Cardiology. Potential hazard been recognized only recently and should be added to cirrhosis of th liver as one of the dangerous side effects of overindulgence, he sai Advice: dilute the alcohol with a mix, sip drink slowly and eat som thing to absorb alcohol so that it is slowly released into blood sys

---

A $49,700 National Institute of Mental Health grant has been awarded to Hinds County Mental Health Association for development of drug ab study program during the coming year, with funding beginning Mar. 1, 1972. Money will allow association and affiliated groups in Jackson area to "make an assessment of the extent and severity of narcotic a diction and drug abuse among its population, and to develop a plan f the provision of prevention, treatment and rehabilitative services."

Chiropractic legislation was suddenly halted before the 1972 Regular Session of the Mississippi Legislature when the Senate Committee on Public Health approved almost unanimously a statement to the Senate pledging that before the next session, a thorough study would be done to present a workable solution to the problem of regulating chiropractors. Mississippi House adopted a committee substitute which caused heated debate prior to passage to Senate.

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Effect on mental acuity: Usually minimal on proper maintenance dosage. (See Warnings in summary of prescribing information.)

Safety: An excellent clinical record. In general use, the most common side effects reported have been drowsiness, ataxia, and confusion, particularly in the elderly and debilitated.

Concomitant use: Is used as adjunctive anti anxiety therapy concomitantly with certain spe cific medications of other classes of drugs, such cardiac glycosides, antihypertensive agents, diuretics, anticoagulants, anticholinergics and antacids. Although clinical studies have not est lished a cause and effect relationship, physician should be aware that variable effects on blood c agulation have been reported very rarely in patients receiving oral anticoagulants and chlo diazepoxide hydrochloride.

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up to 100 mg daily in severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are rev ble in most instances by proper dosag adjustment, but are also occasionally served at the lower dosage ranges. In few instances syncope has been repo Also encountered are isolated instan skin eruptions, edema, minor menstr irregularities, nausea and constipati extrapyramidal symptoms, increased decreased libido—all infrequent and generally controlled with dosage redu tion; changes in EEG patterns (low-vo fast activity) may appear during and treatment; blood dyscrasias (includi agranulocytosis), jaundice and hepat dysfunction have been reported occa ally, making periodic blood counts an liver function tests advisable during tracted therapy.
Supplied: Librium capsules containi 5 mg, 10 mg or 25 mg chlordiazepox HCl. Libritabs® tablets containing 5 m 10 mg or 25 mg chlordiazepoxide.

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JOURNAL OF THE Mississippi STATE MEDICAL ASSOCIATION

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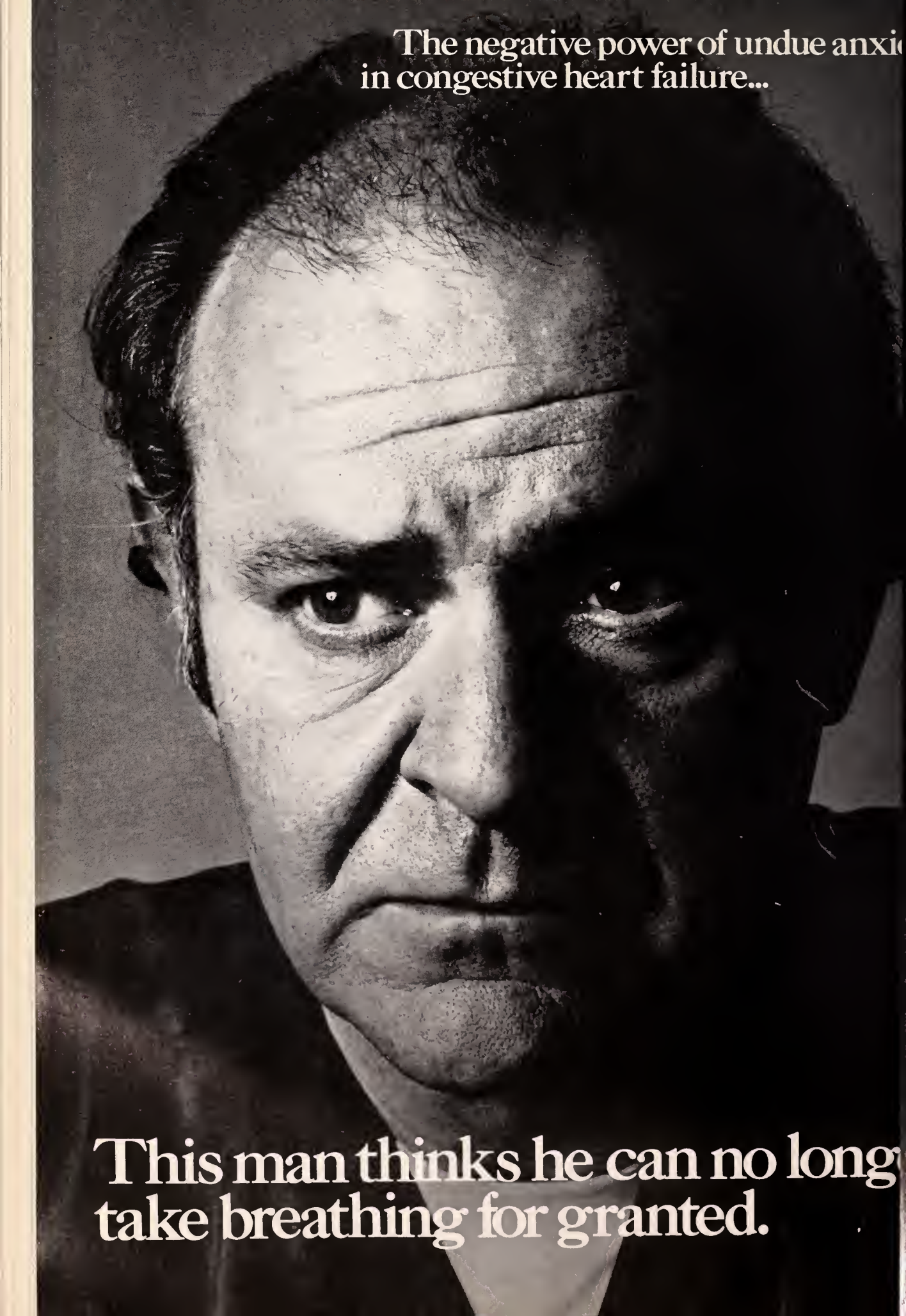
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Concomitant use with primary agents

Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

The positive power of Libritabs®

(chlordiazepoxide)

5-mg, 10-mg, 25-mg tablets

t.i.d./q.i.d.

up to 100 mg daily

for severe anxiety accompanying congestive heart failure

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are apt to encounter aural
difficulties after engaging in various
natatory pursuits."

Furacin® Otic

(nitrofurazone) antibacterial/anesthetic/antifungal

Formula: Contains (w/w) 0.2% FURACIN, brand of nitrofurazone, 0.375% Micofur®, brand of nifuroxime, and 2% diperadan hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.

Indications: For treatment of bacterial otitis externa, bacterial otitis media and otomycosis. In otitis media, this preparation is not effective if the tympanic membrane is intact.

FURACIN (nitrofurazone) and Micofur (nifuroxime) are active against a variety of gram-positive and gram-negative organisms. Activity versus Pseudomonas sp. is limited to certain strains. Micafur (nifuroxime) is active against Candida (Manilia) albicans.

Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary.

Supplied: Bottle of 15 cc. with dropper.

®Originators and Developers of The Nitrofurans
EATON LABORATORIES
Division of The Norwich Pharmacal Company
NORWICH, NEW YORK 13815

Volume XIII
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May 1972



JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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CONTENTS

ORIGINAL PAPERS

Exercise Treadmill Testing as an Aid to Work Capacity — 193 — JAMES C. HAYS, M.D., and PATRICK H. LEHAN, M.D.

Management of the Draining Ear — 197 — MICHAEL E. GLASSCOCK, III, M.D.

SPECIAL ARTICLES

The Physician and Minister Caring for the Terminal Patient — 202 — L. CRAIG RATLIFF, Th.D.

Radiologic Seminar CXVII: Bladder Diverticula and Herniations — 208 — A. WAYNE SULLIVAN, M.D., RAMON R. LUING, M.D., and MARION F. HURST, M.D.

EDITORIALS

Continuing Thoughts on Abortion and Population Control — 211 — W. MONCURE DABNEY, M.D.

Permissiveness and the Chiropractic Issue — 212 — C. D. TAYLOR, JR., M.D.

Poem—"Calomel" — 213 — RALPH L. BOUTON, M.D.

THIS MONTH

The President Speaking — 210 — 'The Association's Year'

Medical Organization — 227 — Dr. James F. Arens Appointed New UMC Anesthesiology Department Head

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Pinworm therapy is often a family affair





Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorex nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddine and headache have occurred. Rarely, tinnitus, hyperirritabil numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise i cephalin flocculation and SGOT; perianal rash, cholestasis a parenchymal liver damage; hyperglycemia; transient leukop malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg

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(THIABENDAZOLE | MSD)



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regimen you prescribe

Side: fever, facial flush, chills, conjunctival injection, edema, anaphylaxis, skin rashes, erythema multiforme luding Stevens-Johnson syndrome), and lymphadenopathy.

plied: Chewable tablets, containing 500 mg thiabendazole, xes of 36, strip packaged, individually foil wrapped; ension, containing 500 mg thiabendazole per 5 cc, in les of 120 cc.

more detailed information, consult your MSD representa- or see the Direction Circular. Merck Sharp & Dohme, sion of Merck & Co., Inc., West Point, Pa. 19486

addendum

MSD MERCK SHARP & DOHME

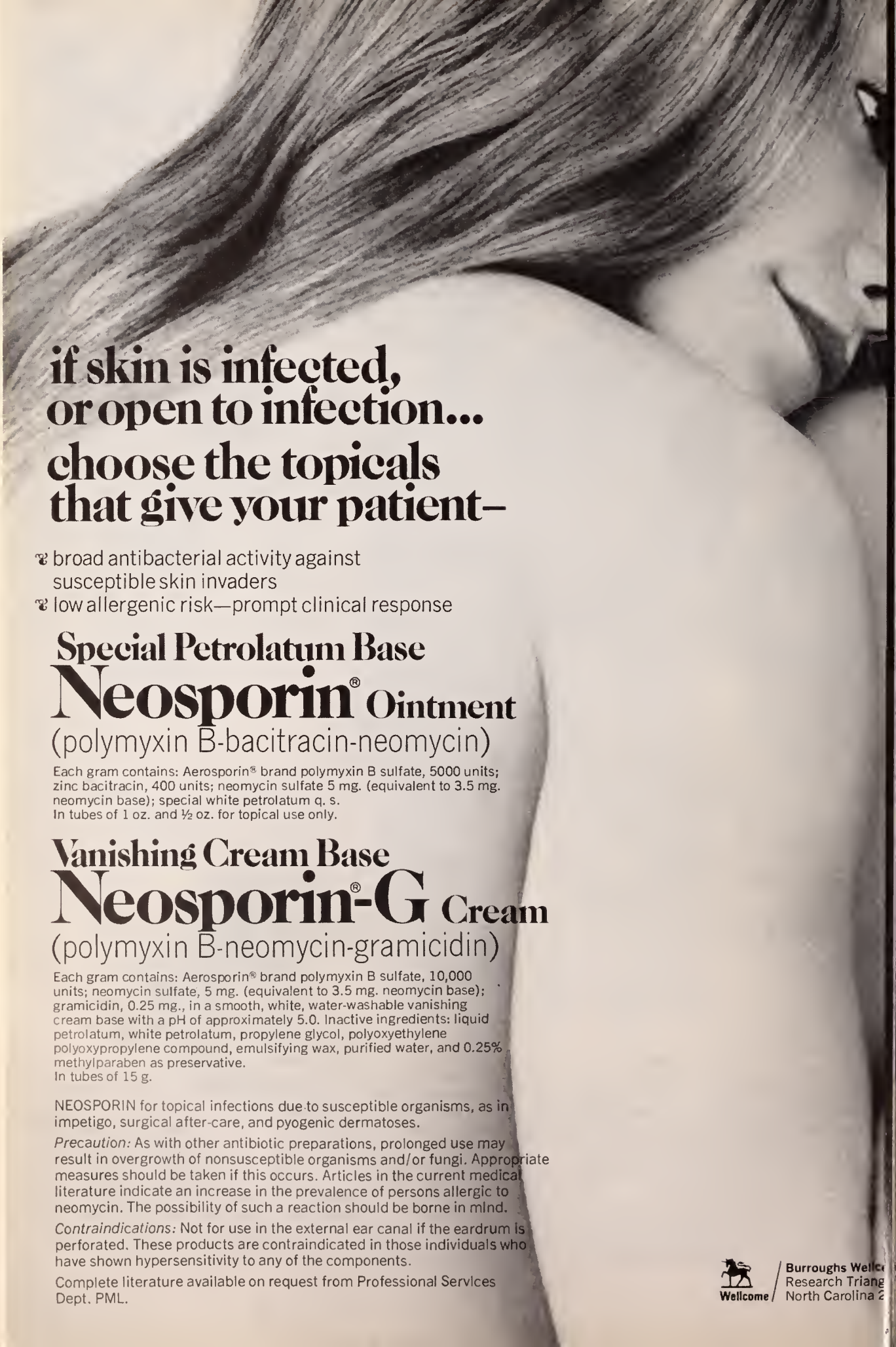
INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



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choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome / Burroughs Wellc
Research Triang
North Carolina 2

NEWSLETTER

May 1972

ar Doctor:

ysicians' fees rose .5% in the last quarter of 1971, whereas Con-
ner Price Index increased .7%. For the whole year physicians' fees
se 5.2%, the lowest since 1965, according to statistics compiled
om the 1971 Statistical Abstract of the United States. Average
ekly net earnings of a physician are approximately $775. Since the
erage work week is about 60 hours, per hour earnings are $12.92.

Average hourly earnings of skilled tradesmen in the Detroit area reported by Michigan State Medical Society research bulletin are: bricklayers, $10.36/hr.; electricians, $10.62/hr.; and plumbers, $10.28/hr. If an electrician worked 60 hours a week (double time past 40 hrs.), he'd earn $44,179 per year.

J. Kinabrew Williams of Pascagoula, president of Mississippi EENT sociation, wishes to pass on the following information published in e Mobile Press-Register: The Alabama Supreme Court ruled that the actice of optometry is not a "learned profession" and that a com-rcial optical store may be permitted to employ an optometrist.

ven postgraduate courses will be offered at the AMA's 121st Annual avention in San Francisco, June 18-22. Courses will be offered acute respiratory failure, anorectal disease, antibiotics, common rmatoses, experiential learning, hand surgery and liver disease. gistration fee is $25.

lgamation of two national organizations of internal medicine, Ameri- College of Physicians and American Society of Internal Medicine, been proposed by a special committee of the two groups and approved their governing boards. Leaders say "it is our belief a combined ganization will enhance our dynamic position in American medicine."

spital expenses are still on the increase, but 1971 marked a slow-wn in the rate of increase, according to figures released by the erican Hospital Association. Total expenses for the nation's com-nity hospitals were $22.5 billion, an increase of 11% over the 1970 gures. A year earlier total expenses increased 17.5%.

Sincerely,

Nola Gibson

Nola Gibson
Assistant Managing Editor

Cardio-Alert Is Introduced

Aetna Cardio-Alert, a two-way radio network which will transmit medical data from a heart attack victim's location to a hospital emergency room, has been unveiled by Saint Francis Hospital and Aetna Life & Casualty.

The system, a breakthrough in pre-hospital coronary care, could save 500 lives annually in the greater Hartford area and is a cooperative effort of private and voluntary ambulance services, police departments and hospitals. The program will be implemented in two phases during the next year in Hartford County and most of Tolland County.

Aetna Life & Casualty is providing $50,000 to finance Aetna Cardio-Alert as a step toward providing better pre-hospital coronary care for heart attack victims. Last year heart attacks claimed 500,000 lives nationally and approximately 5,000 in Connecticut.

On the basis of medical research studies, an estimated 150,000 lives could be saved annually if Aetna Cardio-Alert were adopted nationwide and the public educated in the early symptoms of heart attacks, Aetna said. Research also indicates that up to 500 lives may be spared in the greater Hartford area alone.

Aetna Cardio-Alert transmits electrocardiograms from a heart attack victim's location to a hospital. Physicians on the other end of the two-way communication system can then read the ECG and provide instant instructions to ambulance emergency medical technicians on the necessary drugs to be administered and life-saving duties to be performed during the first critical moments following a heart attack.

Dr. Robert J. Huszar, director of research at Saint Francis Hospital, aided by Joseph Haloburdo, an electronic engineer, developed the system several years ago to improve pre-hospital survival of coronary victims by meeting the need for quick detection and transmission of the heart's condition. Les Hammer, president of Pioneer Medical Systems, Inc. of New Britain, Connecticut, manufacturers of the equipment, redesigned the system for use in any emergency medical service.

Underlining the need for the swiftest possible diagnosis and treatment, Dr. Huszar explained: "Mortality is the highest in the first several hours after the onset of a heart attack. A system like Aetna Cardio-Alert can help eliminate this by delivering the swiftest possible assessment of condition and treatment. Once Aetna Cardio-Alert is operational, numerous lives could be saved in

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Birmingham, Alabama 35212
Phone: 205-836-7201

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rheumatoid arthritic blowup...

Tandearil Geigy

oxyphenbutazone [illegible] tablets of 100 mg

ortant Note This drug is not a simple analges[illegible] not administer casually. Carefully evaluate patient[illegible] re starting treatment and keep them under close [illegible]ervision. Obtain a detailed history and complete [illegible]sical and laboratory examination: complete [illegible]hogram, urinalysis, etc.) before prescribing and at [illegible]quent intervals thereafter. Carefully select patients [illegible]ding those responsive to routine measures; con[illegible]ndicated patients or those who cannot be observed [illegible]quently. Warn patients not to exceed recommended [illegible]age. Short-term relief of severe symptoms with [illegible] smallest possible dosage is the goal of therapy. [illegible]age should be taken with meals or a full glass of [illegible]. Patients should discontinue the drug and report [illegible]ediately any sign of fever, sore throat, oral [illegible]ons, symptoms of blood dyscrasia, dyspepsia, [illegible]gastric pain, symptoms of anemia, black or tarry [illegible]ls or other evidence of intestinal ulceration or [illegible]morrhage, skin reactions, significant weight gain or [illegible]ema. A one-week trial period is adequate. Discon[illegible]e in the absence of a favorable response. Restrict [illegible]tment periods to one week in patients over sixty. *[illegible]ications* Acute gouty arthritis, rheumatoid arthritis, [illegible]umatoid spondylitis. *[illegible]traindications* Children 14 years or less; sensitive [illegible]ients; history or symptoms of GI ulcer, inflammation or [illegible]eration including severe, recurrent or persistent [illegible]pepsia; history or presence of drug allergy; blood [illegible]crasias; renal, hepatic or cardiac dysfunction; [illegible]ertension; thyroid disease; systemic edema; [illegible]matitis and salivary gland enlargement due to the [illegible]g; polymyalgia rheumatica and temporal arteritis; [illegible]ients receiving other potent chemotherapeutic [illegible]nts, or long-term anticoagulant therapy. *[illegible]rnings* Age, weight, dosage, duration of therapy, [illegible]stence of concomitant diseases, and concurrent [illegible]ent chemotherapy affect incidence of toxic reac[illegible]ns. Carefully instruct and observe the individual [illegible]ient, especially the aging (forty years and over), [illegible]o have increased susceptibility to the toxicity of the [illegible]g. Use lowest effective dosage. Weigh [illegible] [illegible]predictable benefits against potential risk of severe [illegible]n fatal, reactions. The disease condition itself is [illegible]naltered by the drug. [illegible] [illegible]ter of pregnancy, and [illegible] appear in cord blood [illegible] fatal blood dyscrasias [illegible] may occur suddenly, [illegible] may become manifest [illegible] of drug. Any [illegible] relative decrease [illegible] immature forms [illegible] immediate cessation of therapy [illegible] long-lasting [illegible] CNS, adrenals and GI [illegible] may potentiate [illegible] taking these agents. [illegible] myxedema have been reported [illegible] antineoplastics, the [illegible] significant toxic [illegible] ophthalmologic examination [illegible] face in patients over [illegible] reducing dosage if edema [illegible] sixty, discontinue drug. *Precautions* The following [illegible] regular intervals. Carefully [illegible] being treated and detect [illegible] adverse reactions, [illegible] including check of patient [illegible] especially for the appearance [illegible] check pertinent laboratory [illegible] at first part of [illegible] coordination, as dry eyes [illegible] have been reported in patients [illegible] and long-term therapy. The most [illegible] were overlooked. Remember that [illegible] can be the presenting symptom [illegible] *Adverse Reactions* These [illegible] can lead to [illegible] and [illegible] can be [illegible] with peptic ulcer and [illegible] perforation of large bowel. [illegible] GI tract [illegible] anemia, gastritis, [illegible] dyspepsia, nausea, vomiting and diarrhea. [illegible]



a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tr

Patients Receiving Narcotics. Talwin is a mild narcotic antagon Some patients previously receiving narcotics have experienced withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administe to patients prone to seizures; seizures have occurred in a few s patients in association with the use of Talwin although no cause effect relationship has been established.

Adverse Reactions: Reactions reported after oral administrat of Talwin include *gastrointestinal:* nausea, vomiting; infrequer constipation; and rarely abdominal distress, anorexia, diarr *CNS effects:* dizziness, lightheadedness, sedation, euphoria, he ache; infrequently weakness, disturbed dreams, insomnia, sync visual blurring and focusing difficulty, hallucinations (see *A CNS Manifestations* under WARNINGS); and rarely tremor, i tability, excitement, tinnitus. *Autonomic:* sweating; infrequer flushing; and rarely chills. *Allergic:* infrequently rash; and ra urticaria, edema of the face. *Cardiovascular:* infrequently decre in blood pressure, tachycardia. *Other:* rarely respiratory depressi urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dos 1 tablet (50 mg.) every three or four hours. This may be increa to 2 tablets (100 mg.) when needed. Total daily dosage should exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in a tion to analgesia, aspirin can be administered concomitantly w Talwin.

Children Under 12 Years of Age. Since clinical experience in c dren under 12 years of age is limited, administration of Talwi this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have recei Talwin orally for prolonged periods have not experienced w drawal symptoms even when administration was abruptly disc tinued (see WARNINGS). No tolerance to the analgesic effect been observed. Laboratory tests of blood and urine and of liver kidney function have revealed no significant abnormalities a prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin o dosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and ot supportive measures should be employed as indicated. Assisted controlled ventilation should also be considered. Although na phine and levallorphan are *not* effective antidotes for respirat depression due to overdosage or unusual sensitivity to Talwin, enteral naloxone (Narcan®, available through Endo Laboratories a specific and effective antagonist. If naloxone is not available, enteral administration of the analeptic, methylphenidate (Ritali may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet cont Talwin (brand of pentazocine) as hydrochloride equivalent to 50 base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (158

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

Hartford County. Other communities could benefit from the program's experience by organizing and maintaining a comparable service."

Aetna's contribution will be used to purchase equipment for the two-phase program. The first phase will be in operation in Hartford and two neighboring towns by early 1972.

The funds will pay for portable two-way ECG radio telemetry units and life-saving equipment on a matching basis with 12 private and volunteer ambulance services in the two counties involved.

In addition, the money will totally finance equipment to strengthen the capabilities of the present base station and to establish two substations to extend the systems's range. The stations will receive voice and ECG signals from portable units in ambulances and transmit instructions from the physician at the hospital to the ambulance team. The base station and the two substations will be connected by telephone wires.

Funds will also be used for remote control equipment in the hospitals. Physicians there will monitor incoming ECG signals, talk with ambulance personnel, and instruct the personnel on life-saving duties to be performed.

At present, Aetna Cardio-Alert System, which has been in limited operation for two years, consists of the base station, remote control equipment at Saint Francis Hospital and ECG two-way radio units in one ambulance service. This equipment was set up during the development phase funded by the Saint Francis Hospital Association.

To bring the benefits of the system to the three remaining hospitals in the two county area, patients to be taken to Manchester Memorial, Rockville General or Johnson Memorial in Stafford Springs will have their condition monitored by the hospitals in Hartford.

A significant part of the network is intensive training of emergency medical technicians and Hartford and Enfield police officers, according to Dr. Huszar. He trained 14 ambulance personnel for phase one this summer. Training was conducted under a grant from the Department of Emergency Medical Services, U. S. Public Health Service (USPHS).

A recently passed law in Connecticut provides for well trained medical technicians to administer any treatment they have been trained to give under the supervision of a physician.

Dr. Huszar is negotiating another USPHS grant to train 10 police officers and 14 ambulance personnel for phase two of the program.

The 10 officers will man two cruisers equipped with ECG two-way radio units and life-saving equipment, if funding is obtained. Three hundred officers will take a basic resuscitation course, and cruisers will have resuscitator-inhalator oxygen.



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DATELINE

P, HEW Sign New ad Start Contract

Evanston, Ill. - The American Academy of Pediatrics has signed a $1,134,600 contract with the Office of Child Development, HEW, renewing and panding the AAP Head Start medical consultation program initiated 1967. New Contract will extend the program through July, 1973 d includes two new provisions: training of 12 regional health specialists and individual self-evaluation at the community level.

norrhea Declines Chicago

Chicago, Ill. - Gonorrhea is declining in Chicago, while on the rise nationally, reports Environmental and Public Health News. Chicago Health officials edit 10% decrease in new gonorrhea cases in 1971 to new state law ch permits doctors to treat VD victims as young as 12 years old without informing parents. Also cited were mass screening with free tests 44 centers, and intensive follow-up treatment.

hen Warned about aring Boots

Atlantic City, N.J. - Girls who wear fashion boots may find themselves with something more than the "wet look," says Dr. Paul H. Steel. He reports that practice has been deluged with women aged 15 to 50 with symptoms of rombophlebitis. Cause proved to be the wearing of too-tight-at-the-top ss boots. Local soaks, rest, elevation of legs and anti-inflammatory lications provided relief from swelling.

N. Is Against axing Pot Laws

New York, N.Y. - There should be no relaxation of international controls aimed at eliminating consumption of marijuana, according to a newly published ted Nations report. "On the contrary," the report said, "present lications are that cannabis represents a serious and growing danger many countries, both in its inherent potential for harm and in its sociation with other forms of drug abuse."

tretch Gloves lieve Arthritis

Philadelphia, Pa. - Rheumatologist George E. Ehrlich has learned from his patients that wearing stretch dress gloves overnight "completely or markedly reed morning stiffness in all but three patients over a 10 day trial." Ehrlich, director of Albert Einstein Medical Center Arthritis Cen, tested gloves on patients ranging in age from 32 to 82. Patients eferred nylon and spandex type.

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Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures neces for optimal control with insulin are also necessary with Orin The patient on Orinase must be fully instructed: about nature of his disease; how to prevent and detect complicati how to control his condition; not to neglect dietary restricti develop a careless attitude or disregard instructions relativ body weight, exercise, personal hygiene, and avoidance o fection; how to recognize and counteract impending hyp cemia; how and when to test for glycosuria and ketonuria; to use insulin; and to report to the physician immediately does not feel as well as usual.

Caution, very close observation, and careful adjustmer dose are necessary when: insulin is withdrawn during the period in order to avoid ketosis, acidosis, and coma; thia diuretics are administered which may result in aggravatio diabetic state and increased tolbutamide requirement, ter rary loss of control, or even secondary failure; treating pati with impaired hepatic and/or renal function and debilitated, nourished, or semistarved patients in order to avoid severe h glycemia which may require corrective therapy over se days; and treating patients with severe trauma, infection, or gical procedures where temporary return to insulin or add of insulin may be necessary. Response to tolbutamide is di ished in patients receiving therapy with beta blocking ag

As some diabetics are not suitable candidates, it is esse that the physician familiarize himself with the indications, l of application, and selection of patients for therapy.

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daily, and during the first month report at least once weekly physical examination and definitive evaluation. After a month, minations are recommended monthly or as indicated. Ap-rance of ketonuria, increase in glycosuria, unsatisfactory ering or persistent elevation of blood sugar, or failure to in and hold clinical improvement indicate nonresponsive-to Orinase (tolbutamide). Orinase does not obviate need for ntaining standard diet regulation. Uncooperative patients uld be considered unsuitable for therapy. Prescriptions should efilled only on specific instruction of physician. In treating asymptomatic diabetic patients with abnormal glucose rance, glucose tolerance tests should be obtained at three-x-month intervals. Orinase is not an oral insulin or a substi-for insulin and must not be used as sole therapy in juvenile etes or in diabetes complicated by acidosis or coma where lin is indispensable.

phenformin is prescribed in combination with Orinase, ap-oriate package literature should be consulted.

dverse Reactions: Severe hypoglycemia, though uncommon, occur and may mimic acute neurologic disorders such as ebral thrombosis. Certain factors such as hepatic and renal ase, malnutrition, advanced age, alcohol ingestion, and nal and pituitary insufficiency may predispose to hypogly-ia and certain drugs such as insulin, phenformin, sulfona-es, oxyphenbutazone, salicylates, probenecid, monamine lase inhibitors, phenylbutazone, bishydroxycoumarin, and nyramidol may prolong or enhance the action of Orinase and ease risk of hypoglycemia. Orinase long-term therapy has n reported to cause reduction in RAI uptake without pro-ducing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity re-actions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache ap-pear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently dis-appear with continued administration. Orinase should be dis-continued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

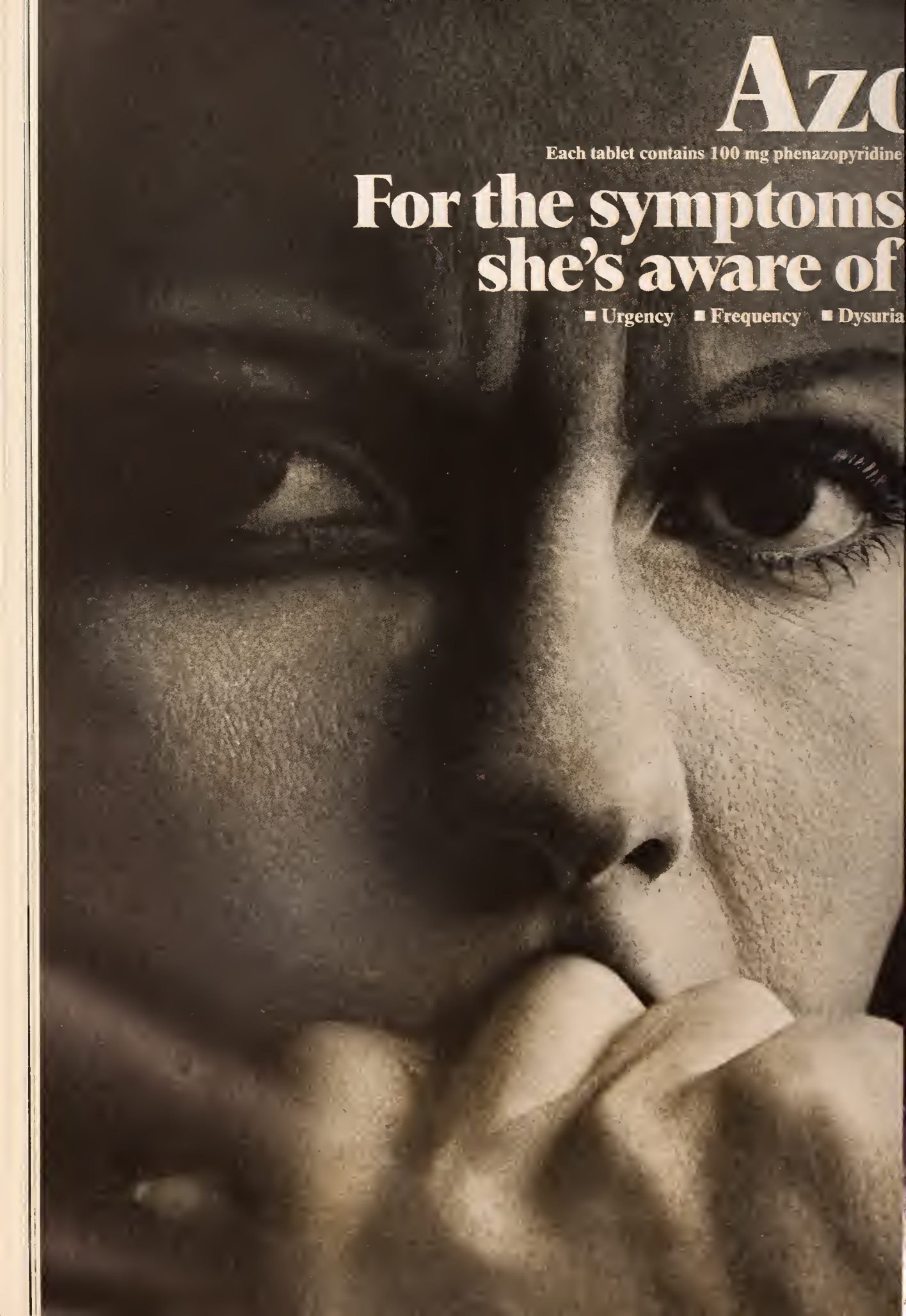
Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranu-locytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

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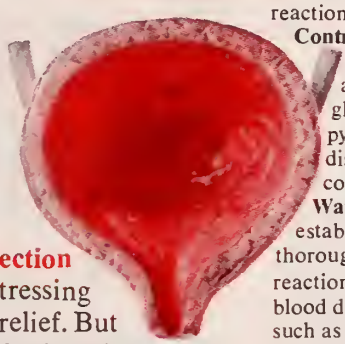
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Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dose-related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
May 1972, Vol. XIII, No. 5

ORIGINAL PAPERS

Exercise Treadmill Testing as an Aid to Work Capacity

JAMES C. HAYS, M.D., and PATRICK H. LEHAN, M.D.
Jackson, Mississippi

The authors describe the Work Evaluation Unit at the University Medical Center in Jackson and discuss its objectives and purposes. They feel that the exercise treadmill test has a definite role to play in the evaluation of a patient for his ability to perform various jobs and also plays an important role in aiding the physician to diagnose ischemic heart disease.

THE WORK EVALUATION UNIT at the University Medical Center has several important objectives and purposes. At the present time its chief function is to provide an objective means of assessing an individual's work capacity by attempting to correlate an individual's performance on the exercise treadmill with various jobs the individual is considering performing. A second function is to provide additional means of exercise stress testing in the diagnosis of various cardiac diseases. Finally, the unit has been used to conduct various research programs at the University Medical Center.

The unit is composed of various team members consisting of the authors, two nurses, a Vocational Rehabilitation counselor, and a secretary. The patients come from various sources; many are referred from throughout the state by Vocational Rehabilitation counselors who are attempting to gain an objective evaluation of a person's actual physical fitness and, more importantly, are attempting to find out what kinds of jobs a person can undertake safely. To date, approximately 200 patients have been evaluated in the unit.

In the unit's early experiences, it soon became evident that clinical evaluation by a physician had certain limitations in terms of evaluating an individual's physical capacity for work. In general, physicians are disease oriented as opposed to function oriented and many do not have the time or equipment to make an objective evaluation of physical fitness. Various procedures have been used to test physical fitness and cardiac reserve including the Master's 2-step procedure,[1] the bicycle ergometer,[2] and the exercise treadmill. Initially, the bicycle ergometer was used to evaluate functional capacity, but because more patients are accustomed to walking as opposed to pedaling a bicycle, it was decided to use the exercise treadmill exclusively to test functional, aerobic capacity.

Figure 1 shows the treadmill used and how a patient is actually tested. After a careful history and physical examination, a baseline ECG is performed and frequently a Master's 2-step test is also performed. Following this, the patient is con-

From the Department of Medicine, University of Mississippi School of Medicine, Jackson, Miss.

nected to a standard ECG monitor and the patient is exercised on a motor-driven treadmill with constant ECG monitoring and blood pressure determinations made every one minute. With the test used in the unit, the work load is increased every three minutes without interruption until a self-determined end-point of fatigue, dyspnea, or angina pectoris is reached. Also, if the patient develops an ataxic gait, becomes hypotensive, or develops frequent PVC's in runs of three or more, the test is terminated.

Following termination of the test the ECG is monitored every 30 seconds, an ABP is taken periodically for 15 minutes. Also the pulse rate is monitored and the rate at which it returns to its pre-test rate gives an indication of cardiovascular conditioning. It is to be emphasized that there is close physician monitoring of the patient both during and after the exercise testing, and there is readily available cardiopulmonary resuscitative equipment including an airway suction apparatus, oxygen, emergency drugs, and a DC defibrillator. To date, with careful monitoring of the patient both during and after the exercise periods, no serious untoward events have occurred.

We feel that the response to treadmill exercise testing provides information about aerobic power that is valuable in the counseling of persons for work in other activities. Although exercise testing in the laboratory cannot evaluate a subject's response to emotional and environmental factors that can influence performance, it provides an objective measurement of physical fitness under test conditions. One can estimate the energy demands of a given job from a detailed description of the job—that is, the type, speed, and pattern of work, the job environment and the skills required. The results of studies of energy levels of jobs and recreational activities have been published.[3]

TABLE 1

AMERICAN HEART ASSOCIATION FUNCTIONAL CLASSIFICATION

Class	*Definition*	*Continuous Effort*	*Intermittent Effort*
I	No restriction of ordinary activities	Up to 5 cal. per minute	Up to 6.6 cal. per minute
II	Slight restriction of ordinary activities	Up to 2.5 cal. per minute	Up to 4 cal. per minute
III	Marked restriction of ordinary activities	Up to 2 cal. per minute	Up to 2.7 cal. per minute
IV	Severe restriction of ordinary activities	Up to 1.5 cal. per minute	

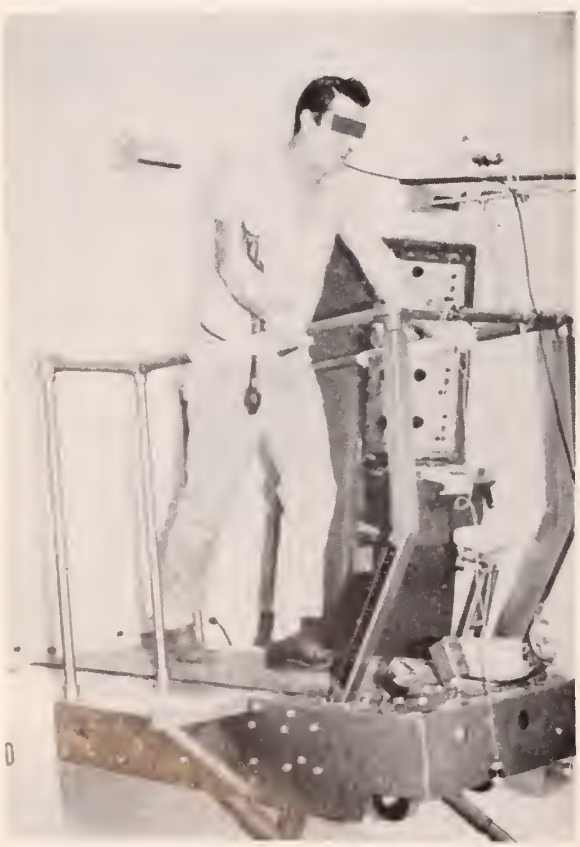


Figure 1

To determine the suitability of a job from the standpoint of energy requirements, both the peak and average caloric requirements should be compared with the subject's fitness. The magnitude and duration of peak efforts should be estimated and compared with the peak levels of the exercise test that the subject was able to achieve.

It is generally the capacity for peak as opposed to sustained effort that is the limiting factor in determining the suitability of a job. Farmers, for instance, reach high levels of energy expenditure in spurts of two to three minutes duration which is frequently followed by a similar period of rest. If the peak effort required for a job exceeds a person's maximum aerobic power, the job should be modified, either by a change of pace or by elimination of those aspects that require excessive effort. If this is not possible, the job should usually be considered inappropriate for the person concerned.[4] The vocational rehabilitation coun-

selor is of great assistance in this phase of the work evaluation process as he is generally in a better position to state specifically how much effort a particular job requires than the physician.

One might now logically ask: "How does one determine aerobic power from the level reached during exercise testing?" Bruce, et al, who have tested several thousand ambulatory normal subjects and cardiac patients, have arrived at a means of correlating oxygen consumption (VO_2ml./Kgm/min.) with the level of testing reached.[5] One can then estimate Kilocalories of energy expenditure by utilizing standard caloric equivalents for the oxygen consumed.[6] The allowable mean caloric expenditure of normal subjects is considered to be approximately 40 per cent of their maximum aerobic power; for patients with heart disease the percentage should be adjusted individually—usually not to exceed 20 per cent of their maximum aerobic power.

For example, if a 75 Kgm subject had a maximum aerobic power of 30 ml./Kgm/min. (able to go 8 minutes into the standard Bruce test), an average sustained workload of 12 ml./Kgm/min. (40 per cent of 30 ml./Kgm/min.) or approximately 5 K Cal/min. would be allowable. Whether a person's job is within his capacity can then be estimated from published data on the energy requirements of his work. The American Heart Association has several pamphlets available to interested physicians stating the caloric requirements of various activities and jobs.[7, 8]

Table 1 shows a correlation between the New York Heart Association Functional Classification and a comparison of continuous and intermittent caloric expenditure for each functional class. Thus, one could arrive at the amount of exercise one could safely do through testing on the treadmill and use these tables to determine the type of job or amount of energy expenditure a patient could safely undertake.

DIAGNOSTIC AID

Although the main purpose of this discussion is to provide information regarding the role of exercise testing in evaluating patients for various jobs, brief mention should be made of the increasing usefulness of treadmill testing in the diagnosis of ischemic heart disease. Most, if not all, physicians are well aware of the tremendous contribution Master and others have made in this field.[9, 10] Sheffield, et al, have advocated submaximal or "near maximal" exercise testing employing the treadmill in an effort to increase the diagnostic yield from exercise testing. The test used by Sheffield and Reeves involves starting at 1.7 MPH and zero grade, and increasing speed and grade gradually as tolerated by the subject over a two to three minute period to induce a heart rate which is 90 per cent of the predicted maximum heart rate for the individual.

The concept behind this form of testing is as follows: maximum heart rate during exercise corresponds with maximum myocardial oxygen consumption in a normal individual. Thus, if one can sustain maximal myocardial oxygen demand without exhibiting ECG or symptomatic evidence of myocardial hypoxia one can infer that a normal

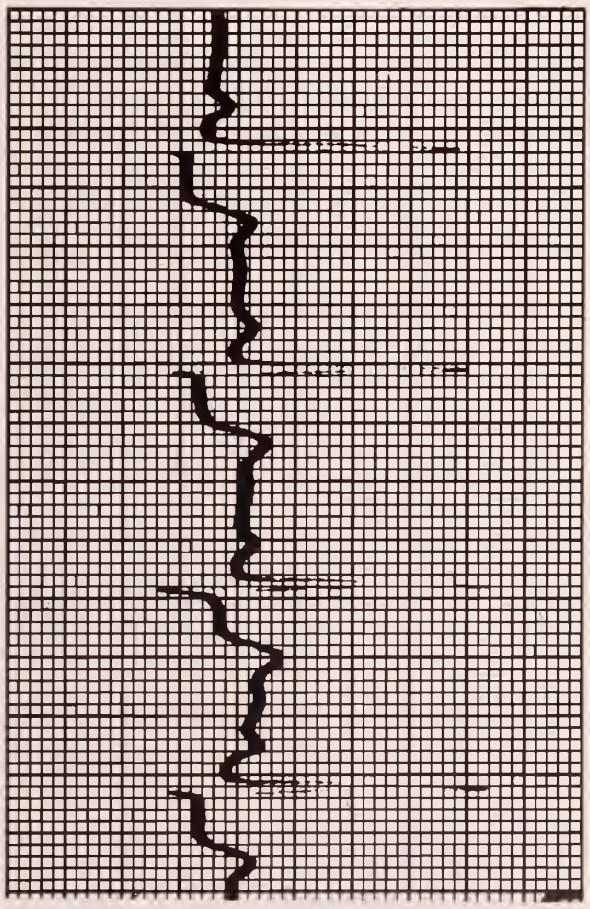


Figure 2

(or nearly normal) coronary circulation is present. For reasons of practicality and concern about patient's safety these authors have chosen to limit testing to 90 per cent of the patient's predicted heart rate and feel that they have definitely increased their diagnostic yield by doing so.

In the Work Evaluation Unit at UMC we have chosen to use "maximal" exercise testing after reviewing the experiences of Bruce and others and feel that this procedure can be safely done under close supervision and observation. To date we

have had no untoward events occur. Although there is disagreement about what constitutes a positive test in terms of diagnosing ischemic heart disease, we have used a criteria of horizontal or downsloping depression of the ST-T segment from the baseline which measures at least 1 mm. and lasts for .08 seconds. By using this criteria, it is felt that many false positives will be excluded, though admittedly a few false negatives will be included.

The test itself is performed in exactly the manner as described above. Figure 2 shows a typical positive response in a person with a classical history of angina pectoris. It should be stated here that we feel that depression of the ST-T segment by itself does not necessarily mean the stress test should be terminated; however, PVC's induced by exercise even without angina would tend to limit the amount of exercise one should undertake. Also, if one fails to raise the blood pressure during the period of exercise one would tend to be reluctant about advising a person to undertake a steady diet of exercise. Some conditions such as aortic stenosis and various arrhythmias are not tested or are done so at the discretion of the attending physicians.

In summary, we feel that exercise treadmill testing has a definite role to play in the evaluation of a patient for his ability to perform various jobs and also plays an important role in aiding the physician to diagnose ischemic heart disease. We feel that it offers the physician a more objective means of safely evaluating a particular patient and certainly will be increasingly used in the future. ★★★

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QUITE A JUMP!

A recent retiree said, "I don't even remember when I was young. Sometimes I think I went directly from Dr. Spock to Dr. Scholl's!"

Management of the Draining Ear

MICHAEL E. GLASSCOCK, III, M.D.
Nashville, Tennessee

Chronic ear disease is defined and standard medical and surgical therapy has been outlined. The author describes some of the newer tympanoplasty and eustachian tube techniques including middle fossa eustachian tuboplasty and tympanomaxillary shunt.

THE DEVELOPMENT of new surgical techniques makes it possible in many instances to restore the chronically infected ear to its normal anatomical and functional state. The purpose of this paper is to discuss some of the more recent advances in the medical management and surgery of chronic ear disease.

The chronically infected ear is referred to as a "chronic ear" or one that has "chronic otitis media." The term implies repeated or continuous infections. There are two basic types: (1) benign central perforation and (2) a more serious condition referred to as a cholesteatoma.

Most often the result of acute hemorrhagic otitis media, the resulting benign central perforation makes the ear prone to repeated infections. Each time the individual has an upper respiratory infection or accidentally gets water into the ear, an acute infection will occur. Repeated infections and granulation tissue can destroy ossicles and will occasionally erode the facial canal with resulting paralysis of the face.

Cholesteatoma is a skin cyst lying in the middle ear cavity and/or mastoid. There are three types:

(1) *Congenital.* When suture lines are forming in the embryo, pieces of ectoderm are sometimes trapped. Over a period of years, these develop into a cyst. They will be seen behind an intact tympanic membrane as a pearly white mass. They may first make themselves known by causing a conductive hearing loss. Occasionally these pearls will occur in the petrous apex. Inside the skull, they are known as epidermoid tumors. As the cysts enlarge, they eventually rupture through the eardrum, become infected, and are indistinguishable from acquired cholesteatomas.

(2) *Acquired.* (A) Primary Acquired. Malfunction of the eustachian tube over a long period will cause such negative pressure in the tympanic cavity that the flaccid portion of the tympanic membrane becomes invaginated into the attic area of middle ear cavity. Once this becomes a sac of skin, it begins to collect desquamated epithelium and enlarges. It then proceeds into the mastoid cavity.

(B) Secondary Acquired. This is usually the result of acute otitis media that ruptured spontaneously near the margin of the eardrum. Most often these occur in the posterior superior quadrant. As the drum head attempts to heal itself, squamous epithelium migrates over the bony margin into the attic, the antrum, and finally into the mastoid cavity. As the sac fills with desquamated epithelium, it begins to enlarge. These ears almost always are infected and drain constantly. An osteolytic enzyme produced by the cholesteatoma erodes bone, thereby destroying ossicles, the labyrinth, exposing the facial nerve, dura, etc.

Chronic otitis media is a localized process continued, as a rule, to the middle ear. Aural hygiene and antibiotics locally (drops or powder) is the

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treatment of choice. Antibiotics systemically are not indicated unless there is a superimposed acute infection with complications, such as extension into the mastoid process. For local treatment to be effective the ear must be cleansed of all debris and purulent material. In the office the most effective way to do this is with a small suction tip and a soft tipped cotton applicator. Once this is accomplished the antibiotics can be instilled into the ear.

At home, the patient is instructed to clean his own ear before instilling drops or powder into the ear. This is accomplished by freely douching the ear with one and one-half per cent acetic acid with a small rubber bulb syringe. The debris and purulent material are washed from the ear allowing the medication free access to the infected tissue of the middle ear.

A central perforation can be controlled with medical treatment as long as the patient keeps water out of the ear. The pressure of cholesteatoma requires surgical intervention.

SURGERY

For many years the prime concern in surgery for chronic ear disease was to control the disease process. No thought was given to the function of the ear. There were several reasons for this. The operating microscope had not been introduced, electric drills were not available and the antibiotic era had not yet arrived. The operation of choice for many years has been the radical mastoidectomy. This procedure calls for removal of the eardrum, ossicles and mastoid air cells. The diseased ear is marsupalized to the outside, thereby creating a cavity.

This operation removes all the diseased tissue and exposes the cholesteatoma sac (when present) to the outside. The patient many times continues to have problems, however. His hearing is seldom better than 60dB; he cannot get water into the ear; and the cavity collects debris and may intermittently become infected.

A variation of this procedure is the modified radical. This operation has limited application in that its main purpose is to preserve residual hearing in the chronic ear with an attic cholesteatoma. In most instances the tympanic membrane is intact and the perforation is in the pars flaccida. By creating a cavity and exteriorizing the cholesteatoma the ear is less likely to cause serious complications. With this procedure it is many times possible to preserve what hearing the patient may have. While this technique is an improvement over the radical operation there is still the problem of the cavity and its limited application.

While there are certain disadvantages to the radical and modified radical procedures they are still routinely employed. The reason for this is that in many instances there is such excessive infection and cholesteatoma present that it is not possible to use one of the more recently developed techniques.

Tympanoplasty is the reconstruction of the middle ear and tympanic membrane in chronic ear disease. The procedure may be performed alone or in conjunction with a mastoidectomy.

WITHOUT MASTOIDECTOMY

A benign central perforation with or without destruction of the ossicles may be handled with the procedure, tympanoplasty without mastoidectomy. The drum head is usually replaced with a connective tissue graft such as fascia, vein or perichondrium. Should ossicular destruction be present the chain can be reconstructed with a banked homograft ossicle or with a strut made of tragal cartilage. The ossicular chain must connect the new eardrum to the oval window of the inner ear in order to obtain a hearing gain.

If the operation is a success, the ear will remain infection free. The individual does not need to fear water and the hearing is usually restored to a serviceable level.

Most authors report a take rate of 90-95 per cent and when there is minimal ossicular destruction, a serviceable hearing gain in 80 per cent of the cases.

WITH MASTOIDECTOMY

There is a fair amount of controversy at the present time concerning the combination of tympanoplasty procedures with mastoidectomy for cholesteatoma.

The newer technique of maintaining the posterior canal wall and thereby preserving a normal ear canal has several advantages. The main one, of course, is the elimination of the cavity that is present with the radical and modified radical procedures.

The reconstruction of the tympanic membrane and ossicular chain returns the ear to its more normal state and in many instances the hearing results are certainly serviceable.

There are some disadvantages to the newer techniques, however, and these should be mentioned. In about 7-10 per cent of the cases residual cholesteatoma may be left in the middle ear or mastoid and cause trouble at a later date.

In severely diseased ears and in those with poor eustachian tube function, there may be a break-

down of the graft and true recurrence of the cholesteatoma.

While the more recent tympanoplasty with intact canal wall procedure is becoming more popular, it has yet to be universally accepted by otologic surgeons.

The greatest cause of failure in tympanoplasty surgery is a nonfunctioning eustachian tube.

Until just recently, it was not possible to operate on the eustachian tube. However, within the last five to six years there have been several successful attempts at reconstruction of the auditory tube. There are two approaches that are currently being employed.

When the bony segment of the tube is blocked by polypoid tissue, fibrous tissue or bone, the best approach is through the middle fossa.

A crainotomy is performed in the squamous portion of the temporal bone. The temporal lobe is elevated and the floor of the middle fossa is exposed. The greater superficial petrosal nerve is identified and followed back to the geniculate ganglion. The bone over the middle ear is removed from above and then the bony eustachian tube is opened to its junction with the cartilagenous segment. Diseased tissue is removed and plastic sheeting is placed into the tube so normal mucosa will regenerate and line the tube. Post-operatively the ear will maintain an air space and the hearing should improve.

While the middle fossa eustachian tube procedure works very well for a blocked osseous segment, it is not applicable for problems in the cartilagenous tube. By far the majority of auditory tube malfunctions occur in this segment. A clever procedure just recently reported is the tympano-maxillary shunt operation.

A large bore rubber tube is placed in the middle ear, brought out superiorly at the root of the zygoma, passed through the infra-temporal fossa and through the posterior wall of the maxillary sinus. The middle ear is aeriated from the sinus through this tube.

DISCUSSION

While there are still many problems to be overcome in chronic ear surgery, many advances have been made in the last 20 years. The newer concepts of restoring function to the ear as well as controlling the disease process are gaining new acceptance from otologic surgeons. It will take many years to prove whether these newer techniques are as dependable as the older ones.

An individual no longer has to accept the stigma of a foul smelling, chronically draining ear. Infection can be controlled in some instances through the proper medical management. Cholesteatoma requires surgical intervention to correct the basic disease process. In many instances the hearing can be restored to a serviceable level through tympanoplasty procedures.

SUMMARY

Chronic ear disease is defined and standard medical and surgical therapy has been outlined. Some of the newer tympanoplasty and eustachian tube techniques have been described. ★★★

Suite 2 300 25th Ave. N. (37203)

ATTA GIRL!

At Show & Tell, it was time for What-Does-Your-Father-Do?, and each child looked forward to his turn. One little girl held up a picture of the Capitol and said, "My daddy's in the legislature. I think he's on the Ways To Be Mean Committee."

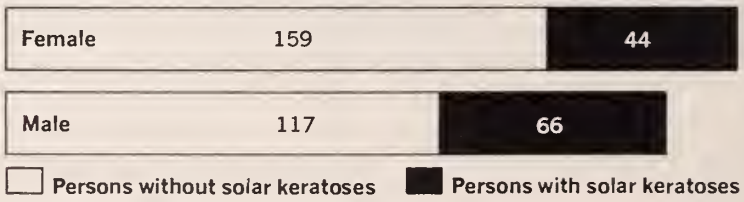
What it means to live and work i Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



olar, actinic, senile keratoses

alled by many names, the typical lesion is flat r slightly elevated, brownish or reddish in olor, papular, dry, adherent, rough, sharply efined; usually multiple lesions, chiefly on xposed portions of the skin.

equence/selectivity of response

rythema in areas of lesions may begin after veral days of therapy; height of reaction nly in affected areas)* usually occurs within o weeks, declining after discontinuation of erapy. Since this response is so predictable, sions that do not respond should be biopsied rule out the presence of a frank neoplasm.

osmetic results

smetic results are highly favorable. Inci- nce of scarring is low—important with multi- facial lesions. Efudex should be applied th care near the eyes, nose and mouth.

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nly Roche formulates the 5% cream... gh in patient acceptability... high in clinical icacy, especially for lesions of hands and rearms... economical.

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Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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The Physician and Minister Caring for the Terminal Patient

L. CRAIG RATLIFF, Th.D.
Hattiesburg, Mississippi

The author, a minister, discusses the problems of the terminal patient. He discusses death and dying in our cultural setting; the stages in death and dying; relating to the terminally ill; and gives some suggestions to the physician, minister and nurse team for more effective service to the dying patient and his family.

OUR SUBJECT MAKES US face a necessary but unpleasant part of our function, relating to the dying. Coping with this situation requires a quality of involvement approaching self-giving. For that reason, care of the terminally ill presents a supreme challenge for those engaged in serving people—physician, nurse, chaplain, and minister.

The care of the terminal patient has become a special interest of mine, causing me, from personal experience, to go back to the books. As I moved from academia to the active pastorate, I became aware of a special need in this area. I have learned about death and dying by being part of the process.

Two medical doctors, both young men who died of cancer, brought me face to face with the problem in poignant terms; one died in his early thirties and the other in his early forties. They taught me much about death and dying. These men were close personal friends, much like brothers. John Donne's words—"Ask not for whom the bell tolls, they toll for thee," were never more true.

Thus my only qualification for this paper is that I am a human being in process, concerned about our common pilgrimage, and aware that minister and physician have a special service to the dying patient.

I presuppose three conditions in this presentation:

(1) The care of people, whether "psycho" or "somatic" must be viewed in wholistic terms. That is, each helping ministry must consider the whole person. The minister does not just work at getting the immortal soul prepared for eternity; the physician does not just treat a malignant prostate, a coronary condition, or a diseased liver. While each of the helping arts has its particular concentration, the concern is for the whole person. In an age of specialization, the physician has special problems here.

> Physicians skilled in the art of medicine realize that to treat the "whole patient" effectively implies an involvement in the emotional, social, economic, and religious aspects of patient's existence. To delay this involvement until the development of gross emotional complications increases the difficulty of effective treatment of the disease.[1]

(2) As those involved in the care of persons, we must relate as whole persons to whole persons. Because of the press of time, we must be particularly sensitive at this point. The greater the person's trauma, the greater must be our involvement with that person. While you must function with professional efficiency, you must also function as a human being. This, as much as anything, is each person's identity-crisis. We must consider who we are in our relation to those who need our care.

(3) The care of persons involves a team concept of service; the physician, the minister, the chaplain and the nurse, should function as a whole, revolving around the patient and his fam-

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Read before the Hattiesburg Clinical Society spring meeting, 1971.

ily. In good East Tennessee terms, I do not see you as practicing medicine, but as "doctoring" patients. Each professional person has a distinctive role in serving patients, but they should merge into a pattern of concern for the patient's general good.

This paper has four divisions: death and dying in our cultural setting; the stages in death and dying; relating to the terminally ill; and some brief suggestions for more effective service.

CULTURAL SETTING

Many have pointed out that urban man has special problems with death and dying unknown to the rural society.[2] There, living close to nature, the life and death cycle was a part of everyday experience. The family unit lived in close proximity; the young saw the old die, the cattle came and went, there was a time and place for each thing in "its season."

Rural society accepted death as a part of living. Death had its dignity. The family gathered around the dying member; there were strict rules for behaviour and grief-expression; the community rallied around the bereaved; the funeral provided emotional ventilation; and the belief in heaven assuaged the sense of loss.

Today's contrast stands stark and clear: many have hardly seen an animal die, much less a human being. Old age and death is the enemy. We say it with flowers and make the cadaver look alive. The emphasis is on youth; our society looks the other way as death passes by.

Death, in the form of the terminal patient, is separated from the living. It starts with a ride in an ambulance, goes through an elevator to a sterile cubicle; surrounded by tubes, hypodermic needles, efficient personnel robed in white, cut off from the outside world, often in increasing isolation because of withdrawn doctors and family, the patient finally dies. Obviously this is a caricature, but it stands in stark contrast to other days. I remember how my grandfather died. We all gathered around the bedroom and waited; we all shared in the experience; he died as part of the living.

Several factors enter into the present situation. Of course a modern hospital cannot be run like the rural home; technology has made certain routines inevitable; specialization of medicine has revolutionized doctor-patient relationships; we cannot go back to simpler times.

But underneath it all, there is change in our society's stance toward death. The dying are segregated from the living because our culture does not accept death. Even though the existentialists have insisted that authentic man must live in constant awareness of his coming demise, most of us reject death. Loss of the hope of immortality, according to Hans Morgenthau is central.

> Yet a secular age, which has lost faith in individual immortality in another world and is aware of the impending doom of the world through which it tries to perpetuate itself here and now, is left without a remedy. Once it has become aware of its condition, it must despair.[3]

Loss of meaning in life is also a central problem. Ignace Lepp, a French psychologist, has dealt with this whole problem in his book, *Death and Its Mysteries*. To quote Lepp:

> . . . those whose lives have no meaning cannot give meaning to their death. They quite naturally fear an absurd death. But they are just as afraid of life and the risks it necessarily contains. Such men, when they find themselves in difficult circumstances, wish they had never been born.[4]

Personal anxiety contributes to the problems of physicians and hospital personnel. Often medical personnel reflect the confusion and depression of our society in dealing with death. Bernard Schoenberg has said that:

> The painful feelings of guilt, depression, and helplessness engendered in the physician are usually alleviated by emotional withdrawal and avoidance. Due to the modern trend in medical care toward the strict division of labor in caring for the patient, many traditional functions of the physician and nurse have been transferred to others, resulting in a dilution of the traditional one-to-one relationship.[5]

While none of this information is new to us, it helps us understand the predicament we face in dealing with the terminal patient. Our society, our training, and our own personal anxiety are parts of the problem. In a word, to deal effectively with death, you must deal with your own relationship to your culture, your patient, and the meaning of life and death itself.

DEATH AND DYING

Now to the process of death and dying itself. Most of this section is a summary of Elizabeth Kubler-Ross's book, *On Death and Dying*.[6] Her book came out of an interdisciplinary seminar started by the Department of Psychiatry at the University of Chicago Billings Hospital in 1965. Approached by four students from Chicago Theo-

logical Seminary, Dr. Kubler-Ross, a psychiatrist, asked the question, "How do you do research on dying?" The answer was, "Ask the dying." Over a period of months, about 200 interviews were conducted by Dr. Kubler-Ross, the chaplain, and other interested persons. The patient was approached and asked if he would like to participate, emphasizing that the patient would, in a real sense, be the teacher.

First, there is a distinction between death and dying. Many fear the process of dying more than they do death itself. The patient will fare much better when the physician takes the time to answer his many questions. Fear of the illness and agony that precede death may be dispelled by communication. If the patient knows his doctor will be with him, if he can be assured that pain will be controlled, if he can be accepted as a dying person, the dying task is much easier. Confidence in the physician is a sine qua non of effective relationships. Even in the face of the inevitable, it is helpful for the patient to know that "his doctor is with him."[7]

DENIAL AND ISOLATION

The first stage in dying is denial and isolation. The first shock may completely stun the individual. "There must be some mistake," is a usual reaction: "This can't be me." Often the patient immediately withdraws.

How the patient learns of his condition is important. Usually the patient soon knows of his real condition whether he is told or not. If he is not openly assured that all is well, or if he is told "nice things" with qualifications, the patient senses his real condition. However, at this time he may not want to talk about his real condition. This initial radical defense by denial is normal.[8]

Often the patient makes great plans about the future, ignoring the threat of death. After surgery, a friend of mine told me how well he was recovering, showing how he could swing his favorite shotgun—and made plans for us to go on a goose hunt—while he and I both knew his plans were fantasy.

Second, the patient goes to a stage of anger. The patient, having to face his coming death, becomes angry, just as a man robbed of his lifework is angry. This anger and frustration may be vented at any and everyone.

> . . . this stage of anger is very difficult to cope with from the point of view of family and staff. The reason for this is the fact that this anger is displaced in all directions and projected onto the environment at times almost at random. The doctors are just no good, they don't know what tests to require and what diet to prescribe. They keep the patients too long in the hospital or don't respect their wishes in regard to special privileges.[9]

Family and friends may be insulted, any little thing may be the occasion for an outburst, and generally the patient will be unmanageable. The tendency is to answer kind with kind, to withdraw and let the patient "stew in his own anger." Acceptance at this point is vital. The patient must be taken for what he is: a person in great pain who is hurting because of the trauma of death.

Often, though not always, the patient may go through a third stage, bargaining: The patient will promise God or anybody else most anything in an attempt to gain more time.

BARGAINING

> The third stage, the stage of bargaining, is less well known but equally helpful to the patient, though only for brief periods of time. If we have been unable to face the sad facts in the first period and have been angry at people and God in the second phase, maybe we can succeed in entering into some sort of an agreement which may postpone the inevitable happening: "If God has decided to take us from this earth and he did not respond to my angry pleas, he may be more favorable if I ask nicely."[10]

DEPRESSION

The fourth stage is depression. Anger passes and the patient comes to terms with things as they really are.

> When the terminally ill patient can no longer deny his illness, when he is forced to undergo more surgery or hospitalization, when he begins to have more symptoms or becomes weaker and thinner, he cannot smile it off anymore. His numbness or stoicism, his anger and rage will soon be replaced with a sense of great loss.[11]

Depression has two sources. One source may be reactive. There are things that need tending to, and the patient cannot do them. There may be fears about the course of illness that can be dispelled by proper communication. Then there may be guilt and shame that needs working through. Often in conversation with a trained person, guilt can be confessed and absolved and shame can be put to rest.

However, the other source of depression may be preparatory, as the patient prepares himself for death. He begins separating himself from this

world in anticipation of his coming death. He becomes withdrawn and seems preoccupied. He will limit his conversation and his contacts. The preparatory grief must be accepted.[12]

Finally, if all goes well, the patient comes to accept his coming death. However, one must understand the nature of this stage.

> Acceptance should not be mistaken for a happy stage. It is almost void of feelings. It is as if the pain had gone, the struggle is over, and there comes a time for "the final rest before the long journey" as one patient phrased it. This is also the time during which the family usually needs more help, understanding, and support than the patient himself.[13]

The patient who moves to this stage may exhibit a spirit that actually frightens his associates. I spoke of the young M.D. who died of cancer while only 32 years of age. Bob worked through his coming death, reflected in these words: "I don't understand my feelings about this illness; I thought I would be bitter. I guess it's better to live good for 32 years than to live poorly for a long time. I'm ready to die now." I'll never forget the feelings I had when Bob asked me to visit him for the last time, specifically wanting to talk about the meaning of death and the after-life.

GAINING ACCEPTANCE

Often, the terminal patient works through to acceptance in such a manner that family and medical personnel cannot comprehend. "He must be off his rocker," one student reported after an interview with a patient. Most people I have worked with have, before their death, come to terms with their future. During this time, usually the doctor or minister can be of most help simply giving support by quiet presence. One can simply sit in the room with the patient for a few minutes, hardly saying a word; often the deepest communication is non-verbal.

When the patient works through to acceptance, when the doctor and minister have been part of the process, when the family has received proper support, and when the patient finally dies, a sense of peace may result. Doctor and minister have done their part in serving the whole person during his most traumatic experience.

Dr. Kubler-Ross also emphasizes that hope is usually present during the dying process. Often it will come and go, depending on how the patient feels. Hope may have a limited reach, such as for a "few more weeks," or it may focus on total recovery. While hope without a real basis must not be encouraged, the patient's ability to have some hope must not be put down. Hope may sustain a person and keep his spirits up during the most difficult days.

Now we look directly at relating to the terminal patient. First, we must understand who that patient is. This presents particular problems in an age of specialization. But as the patient is the key person in the drama, he must be the first concern. Schoenberg says that:

> The dying patient's reaction to his disease, treatment, and impending death must be understood in terms of numerous and sometimes conflicting factors. The patient with a life history of previous relationships and numerous experiences related to loss, illness, and medical care must be approached as an individual. An evaluation of his current situation involves an understanding of the significant aspects of his life in the familial, social, occupational, and religious areas, as well as in the external sources of love, comfort, and support which are derived from relationships with others. What is the patient's concept of self and body-image, his ability to recognize and cope with reality, his reaction to dependency, pain, and uncertainty? What are his sources of pleasure, his state of conscience, and his philosophical approach to life and death?[14]

Above all, there must be a determined effort to defeat the too often present "conspiracy of silence."

> A "conspiracy of silence" is, in nearly all cases, most destructive, since it erects a barrier between the patient and others in his environment which compounds his feelings of estrangement. To isolate the dying patient from others also removes the opportunity for him to express his thoughts and to allow his feelings for others to emerge. The decision of whether or not to verbalize his prognosis is determined by the healthy individual, the physician, who is unable to identify totally with the dying patient and his needs.[15]

Recent surveys have shown that better than three-quarters of the dying patients wish to discuss their conditions. The patient may retreat into isolation where he receives no response to his probings at this point. "It is the conspiracy of silence that is most destructive since it tends to separate the dying from the living and offers the patient no opportunity to verbalize his feelings and thoughts, or allow his positive feelings for others to emerge."[16]

My feeling is that the physician must "call the signals." First, he must communicate with the pa-

tient. Just how this begins is the physician's province.

> In summary, then, I believe the question should not be stated, "Do I tell my patient?" but should be rephrased as, "How do I share this knowledge with my patient?" The physician should first examine his own attitude toward malignancy and death so that he is able to talk about such grave matters without undue anxiety. He should listen for cues from the patient which will enable him to elicit the patient's willingness to face the reality. The more people in the patient's environment who know the diagnosis of a malignancy, the sooner the patient himself will realize the true state of affairs anyway, since few people are actors enough to maintain a believable mask of cheerfulness over a long period of time. Most, if not all of the patients, know anyway.[17]

THE PHYSICIAN'S ROLE

During this process, the physician should be aware of the role he plays with the patient. He is almost the "Almighty." The patient may well make the doctor his whole frame of reference. The physician must be very careful to use this trust wisely. If the physician takes time to listen, soliciting questions, relating as a warm human being, the patient's outlook will usually be positive.

Such conduct by the doctor is not easy; the coming demise of the patient may represent personal failure for the physician. Also the physician is personally reminded of his own mortality in the presence of death.

Secondly, as the one who calls the plays, the physician could profit from enlisting the help of ministers or chaplains in the care of the dying. A call from the physician to the pastor—or if possible, a conversation over a cup of coffee—can brief the pastor on the situation. He could report the prognosis, the patient's attitude, and give some view of how the illness will progress.

When the patient is in a particularly difficult time and needs someone to listen or reflect, the pastor can be enlisted to fulfill this role. A simple message via a nurse to a pastor that "so and so could use your presence" would be helpful. If the physician and pastor have a good working relationship, often the minister can carry a good bit of the load. However, we must admit that such cannot always be the case.

The same relationship is helpful to the family. The family should be given an opportunity to ask the questions on their minds. Often the consultations are so brief and hurried that more questions are raised than answered. Often the physician must deal with both the patient's and the family's guilt.[18]

Finally, some systematic training should be given all personnel, whether ministerial, physician, or nurse, on dealing with the terminal patient.

> Although trained to give specialized medical or nursing care to terminal patients, much of their behaviour towards the dying resembles the layman's. The training that physicians and nurses receive equips them principally for the technical aspects of patient care; their teachers deal only briefly or not at all with the management of the emotional response to patients to illness and death.[19]
>
> In the health professions in general, minimal attention is paid during training to the psychosocial care of the dying patient. Hospital personnel receive meager support in caring for dying patients and minimal opportunity to deal with their emotional reactions to death. Care of the dying patient usually induces such anxiety in health personnel that in many hospitals, emphasis is placed on the routine technical aspects of physical care rather than on the development of close interpersonal relationships with patients.[20]

SUMMARY

In summary, let me make these suggestions:

(1) Those involved with care of the terminal patient must come to grips with their own mortality. Whatever your frame of reference, you can do good work with the terminally ill only as you come to grips with your own human situation.

(2) Special thought should be given to handling the problems of terminal illness. Care should be given in dealing with the patient and his family. Seeing the minister, doctor, and nurse as a team, establishing communications and having common understandings, will be extremely beneficial.

(3) Some group sessions and training for the doctor, minister and nurse would be most helpful. Under the sponsorship of the local medical association and ministerial alliance, such a program will be possible. Discussion of terminal illness, its stages, and the respective roles of doctor and minister can result in better care for the patient.

(4) A well trained chaplain, employed by the hospital, can assist both the physician, minister, patient, and family. A specialist in this area can

be as helpful as a specialist in the field of medicine. ★★★

University Baptist Church (39401)

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TEACHERS' VIEWPOINT

"If you really want an experience, go to a chiropractor. You can't believe what chiropractors do to you. All the pulling, the shoving, the twisting, the cracking. We had a friend who saw one last week. By the time he left, he'd signed one check and three confessions."—Mississippi Educational Advance

Radiologic Seminar CXVII: Bladder Diverticula and Herniations

A. WAYNE SULLIVAN, M.D., RAMON R. LUING, M.D., and MARION F. HURST, M.D.
Meridian, Mississippi

A CYSTOGRAM IS a radiographic procedure in which a radiogram of the urinary bladder is obtained following its opacification with contrast media. A urethrocystogram is a radiographic picture of both urethra and bladder. Such films are of value in detecting various lesions, such as vesical neoplasm, calculi, prostatic obstruction, diverticula and various forms of neuro-muscular diseases.

Diverticula of the bladder are composed of pouches of vesical mucosa surrounded by fibrous tissue, fat and occasionally non-striated muscle. They are classified as two kinds:

(1) Developmental diverticula. Their location is usually the lateral or posterior bladder wall above the trigone, and their opening lies near a ureteric-orifice. This type of diverticulum probably represents supernumerary ureteric buds.

(2) Secondary diverticula. They are devoid of muscular coat and are the product of vesical obstruction. They may be single or multiple, small in size or even larger than the bladder itself.

Sponsored by the Mississippi Radiological Society.

CASE REPORTS

We would like to present three cases of bladder diverticula and bladder herniations.

Case No. 1. Sixty-four year old white male complaining of weakness, general malaise and difficulty in voiding. Urinalysis showed pyuria and microscopic hematuria. As shown in Figure



Figure 1 (Case 1)



Figure 2 (Case 1)



BECAUSE ALLERGIES ARE A YEAR-ROUND THING.

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DOW PHARMACEUTICALS

Femininity & Vaginitis



lany women still believe that a ouche is a cure-all for vaginal ecretions and malodor. Mother lls daughter and the myth is erpetuated.

Other cosmetic products are not uch better. Though they may be ffective in some minor infections, ey cannot touch the real medical roblem, which very often is chomonal vaginitis.

Medicine's most effective cure for trichomonal vaginitis is Flagyl® (metronidazole). It is also pleasantly feminine because it provides the simplicity of oral medication . . . frees women from the unpleasant mess and bother of douches.

When the problem is trichomonal vaginitis . . . remember Flagyl. It cures trichomoniasis with an unmatched high degree of effectiveness.

Flagyl is indicated for the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture.



Flagyl®

brand of (metronidazole)



Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture. The oral form is indicated also for intestinal amebiasis and amebic liver abscess.

Contraindications: Evidence or history of blood dyscrasia, active organic disease of the CNS, the first trimester of pregnancy and a history of hypersensitivity to metronidazole.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to those pregnant patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified. Flattening of the T wave may be seen in EKG tracings.

Dosage and Administration

For Trichomoniasis. In the Female: One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during, and after treatment are recommended. Vaginal inserts of 500 mg. are available for use particularly in stubborn cases. *When the vaginal inserts are used,* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male:* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

For Amebiasis. Adults: For acute intestinal amebiasis, 750 mg. orally three times daily for 5 to 10 days. For amebic liver abscess, 500 to 750 mg. orally three times daily for 5 to 10 days.

Children: 35 to 50 mg./kg. of body weight/24 hours, divided into three doses, orally for ten days.

Dosage forms. Oral tablets of 250 mg. and 500 mg.

Flagyl

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Figure 3A (Case 1)



Figure 3B (Case 1)



Figure 4 (Case 2)



Figure 5 (Case 3)

1, a supine film of abdomen demonstrates a semiopaque mass arising from the pelvis up to the level of L 4.

Figure 2, a film of a U.G.I. study again shows a semiopaque mass arising from the pelvis.

In Figures 3A and 3B, a cystogram shows a contracted bladder due to bladder outlet obstruction. There is a large diverticulum measuring about 15 x 20 cm's arising from the superior aspect of the bladder. Two smaller diverticula can be seen also.

Case No. 2 and Case No. 3 represents two different patients, one seen on March 2, 1970 and another on January 4, 1971, because of difficulty in voiding. Radiographic examination demonstrated bladder herniations.

In Case No. 2, Figure 4 demonstrates herniation of the urinary bladder into a right inguinal hernial sac.

In Case No. 3, Figure 5 demonstrates herniation of a bladder diverticulum into a left inguinal hernia. Notice the additional diverticula. The densities within the soft tissues of the buttocks are due to intramuscular medication. ★★★

1418 22nd Avenue (39301)

REFERENCES

1. Shanks and Kerley: Textbook of X-ray Diagnosis. Vol. III-1950, pp. 800-801.
2. Wesson: Urologic Roentgenology pp. 101, 248, 252, 253, 258.



The President Speaking

'The Association's Year'

ARTHUR E. BROWN, M.D.
Columbus, Mississippi

As I WRITE my last president's page at the end of my year as president of the Mississippi State Medical Association, my mind is filled with thoughts of the things accomplished and of things that were left undone. We hear of discord and dissent and a loss of interest in the state association. I think that I can refute some of these charges. As one who has traveled many miles in visits to local society meetings, I have been in contact with the work at the county level. It seems to me that the members are interested and are anxious to keep themselves informed of the many changes in our society work.

The EMCRO program which we hope will get our Foundation for Medical Care program working is of course the newest and biggest project and many are questioning this. One of the morning sessions at the annual meeting will take up the socioeconomic problems for discussion. It seems that most of the members know that great changes in our method of practice are here to stay and we must meet the problems in a united way. Any fragmentation of our efforts will lead to changes such as a takeover by Federal programs. We hope this can be averted.

It was with deep humility that I accepted the honor to serve as your president. It is with deep appreciation that I wish to extend my thanks to the members for such an honor and for the gracious hospitality extended to Dorothy and me in our travels around the state.

My thanks also go to the officers and Board of Trustees whose wisdom, knowledge and cooperation have been my guiding light throughout the year. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XIII, NUMBER 5
MAY 1972

EDITORIALS

Continuing Thoughts on Abortion and Population Control

WHILE THE RECENT REPORT of the President's committee on Population Growth and the American future may tend to disarm some of the more moderate thinkers in this field, population control remains one of the most pressing problems of our society.

"Sterilize welfare recipients. Take away your children's income tax exemptions. Require permits to have a baby." These are some of the drastic measures population zealots warn may be necessary to save us from being buried by pollution and other people.

"Stamp out poverty. End Racism. Give women equality with men." These are measures actually proposed by the Presidential commission that has just completed the most authoritative study ever made of this country's population problems.

The Commission stated, "population stabilization would be primarily the result of measures aimed at creating conditions on which individuals, regardless of sex, age, or minority status can exercise genuine free choice."

While prostaglandins offer great promise, until these are practical or others, as yet undiscovered, are perfected, only abortion offers the ultimate tool.

Four of the 24 members of the committee refuse to endorse abortion as a proper instrument and even our President stated "abortion is an unacceptable method of population control."

Despite this, the commission recommended government subsidy of abortion, liberalization of state laws pertaining to abortion and the inclusion of abortion in insurance contracts.

To appreciate more fully the medico-legal confusion pertaining to abortion, see the editorial in the February 1972 issue of the JOURNAL MSMA.

Public opinion will decide this issue in the long run. A poll conducted by the commission found that half of all Americans believe abortions should be decided solely between physicians and their patients.

Two years ago the citizens of Washington State, the only major referendum on this issue, voted to legalize abortions by a margin of more than 100,000 votes.

W. MONCURE DABNEY, M.D., *Editor*
Crystal Springs, Miss.

Permissiveness and the Chiropractic Issue

PERMISSIVENESS HAS CREPT into our society and acts as a blight to destroy many of the high standards that were so jealously guarded but a short time ago. Our state medical association has had a consistently strong attitude about chiropractors and cultism, and now we have those among us who feel that we should grant stature to this cult by recognizing them in some way with registration or licensure. Under the present Medical Practices Act there are controls, if properly administered, to prevent practicing by such individuals.

Forty-eight states recognize them in some way or another by attempting to regulate them, but still the Department of Health, Education, and Welfare; the Department of Defense; the Postal Workers Union; the AFL-CIO; most senior citizen groups; and many others will not even give them the time of day.

Chiropractors want to be put on the same level with medical doctors, yet they have gotten their system of "healing" from a man who manipulated the spinal vertebrae of a deaf mentally retarded patient and restored his hearing. This man had never been trained in anatomy, physiology, pathology, biochemistry, bacteriology or any of the basic sciences. Chiropractic schools are not accredited by any of the usual recognized accrediting agencies. In fact, many operate as "diploma mills" without residence requirements. (One such school operates in the delta region of Mississippi.)

How would one go about separating the "white hats" from the "black hats" among such a gathering? The advertisements that appear in all our papers about the value of chiropractic list many diseases that we know have their pathophysiology involved in many of the organ systems, and a popping of the neck or manipulating of the spine do little to alleviate hemorrhoids or diabetes. The unsuspecting public reads glowing accounts of "cures" and falls prey to such promises. It is our obligation to stop such practice.

Permissiveness fragmented our membership this year and we are going to have to face the issue of a positive approach before the Committee on Public Health of the Mississippi Senate. They want to work for a bill that will prevent this problem of chiropractic from rising year after year. If we can properly educate and support this committee, perhaps we can assist in writing such a bill. Our House of Delegates will have to instruct us.

C. D. TAYLOR, JR., M.D.
Chairman, Council on Legislation

SBH Warns About Plastic Cooking Bags

The Accident Prevention Program of the Mississippi State Board of Health has received notification of possible accident and injury resulting from the improper use of plastic oven roasting bags. The Food and Drug Administration has investigated 93 accidents involving the oven bags. In these accidents 12 persons received burns; one was serious.

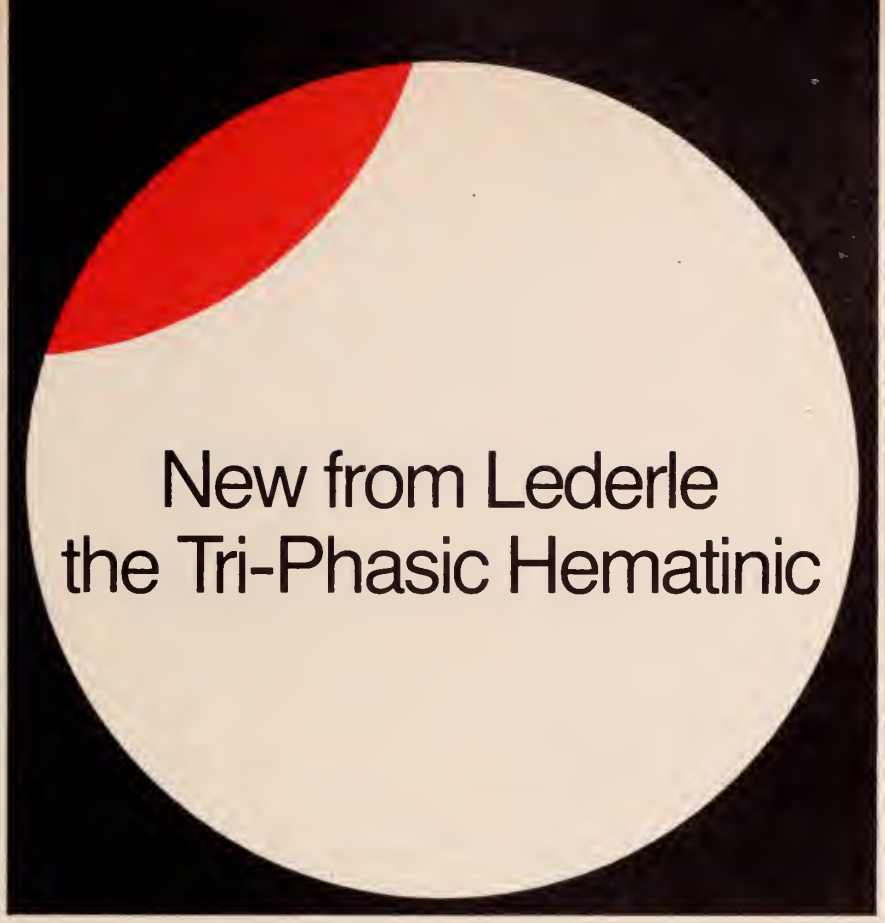
The FDA is working with the manufacturers to have better and more understandable instructions printed with the oven roasting bags but in the meantime the following precautions should be taken by persons using these products:

(1) To protect against bursting and release of hot fats and juices, coat the inside of the bag or wrap with at least one tablespoonful of flour. If the bag comes with seasoning or sauce mix, do not use flour but follow the package directions.

(2) Use a pan large enough to contain the entire bag or wrap and deep enough to hold all liquids that may be released during cooking. The pan should always be at least one and one-half to two inches deep.



The quickest way to a man's heart is through his stomach, isn't it?"



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in the treatment of anemia



PHASE 1
Enhanced Absorption

Each tablet provides 115 mg elemental iron as the highly absorbable ferrous fumarate *plus* 600 mg of Vitamin C.



PHASE 2
Erythrocyte Formation

Each tablet provides Vitamin B_{12} (25 mcg) and Folic Acid (1 mg) to replace deficiencies.



PHASE 3
Premature Hemolysis

Each tablet provides Vitamin E, which may be involved in lessening red blood cell fragility.



For common anemias
as well as problem ones

TriHEMIC™ 600
HEMATINIC TABLETS

Tri-Phasic Hematinic with 600 mg Vitamin C PLUS Vitamin E

Each tablet contains:	
Vitamin C (Ascorbic Acid)	600 mg.
Vitamin B_{12} (Cobalamin Concentrate, N.F.)	25 mcg.
Intrinsic Factor Concentrate	75 mg.
Folic Acid	1 mg.
Vitamin E (*d*-Alpha Tocopheryl Acid Succinate)	30 Int. Units
Elemental Iron (as present in 350 mg. of Ferrous Fumarate)	115 mg.
Dioctyl Sodium Sulfosuccinate U.S.P.	50 mg.

Dosage: One Tablet Daily.
Available in Bottles of 30 Tablets.
On Your Prescription Only.



Precautions: Some patients affected with pernicious anemia may not respond to orally administered Vitamin B_{12} with intrinsic factor concentrate and there is no known way to predict which patients will respond or which patients may cease to respond. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended. If any symptoms of intolerance occur, discontinue drug temporarily or permanently. Folic acid, especially in doses above 1 mg. daily, may obscure pernicious anemia, in that hematologic remission may occur while neurological manifestations remain progressive.

Adverse Reactions: G.I.: nausea, vomiting, diarrhea, abdominal pain. Skin rashes may occur. Such reactions may necessitate temporary or permanent changes in dosage or usage. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

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Tri-Phasic Hematinic with 600 mg Vitamin C PLUS Vitamin E

Specifically formulated with vitamins and minerals important in the treatment of anemias, plus a stool softener to counteract the constipating effects of iron

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421-

CALOMEL

DR. RALPH L. BOUTON

Physicians of the highest rank
To pay their fees we need a bank
Since wisdom, art, science and skill
Are all composed of calomel

Since calomel's become their boast
How many patients have they lost
How many thousands do they kill
Or poison with their calomel

Where ere the patient may complain
Of head or heart or nerve or vein
Of fever high or parch or swell
The remedy is calomel

When Mr. A or B is sick
Go call the doctor and be quick
The doctor comes with much good will
But ne'er forgets his calomel

He takes the paticnt by the hand
And compliments him as a friend
He sits awhile his pulse to feel
And then takes out his calomel

He calls to the dear patient's wifc
Have you clean paper spoon or knife
I think your husband might do well
To take a course of calomel

He then deals out the fatal grain
This, marm, I'm sure will ease his pain
Once in three hours at sound of bell
Give him a dose of calomel

The man grows worse quite fast indeed
Go call for counsel ride with speed
The counsel comes like post with mail
And doubles the dose of calomel

The man in death begins to groan
The fatal job for him is done
His soul is winged for heaven or hell
A sacrifice to calomel

Physicians of my former choice
Receive my counsels and advicc
Be not offended though I tell
The dire effects of calomel

And when I must resign my breath
Pray let me die a natural death
And bid you all a long farewell
Without a course of calomcl. ★★★

Dr. Ralph Leonard Bouton practiced medicine in Tippah and Benton Counties, Mississippi, from 1848 until 1880. He had three sons and one grandson who all practiced medicine in this same area. This poem by Dr. Bouton was written about 1850 and was contributed to the Journal MSMA by Dr. Raymond S. Martin, Jr., of Jackson.

POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

May 1-5, 1972

NEPHROLOGY INTENSIVE COURSE

University Medical Center, Jackson
May 1-5, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
John D. Bower, M.D., associate professor of medicine, The University of Mississippi School of Medicine, director, artificial kidney unit, The University of Mississippi Medical Center

This year's final onc-week intensive course, the nephrology session will concentrate on reversiblc and treatable forms of kidney disease, including indepth study of management of acute kidney failure and control of reversible features of chronic kidney disease. Registrants will also cover management of pyelonephritis, fluid and electrolyte problems and acid base balance.

CIRCUIT COURSES

NORTHERN CIRCUIT

Columbus—April 25—Session 3; Ramada Inn, 6:30 p.m.
Session 3—Inhalation Therapy, Dr. T. Walter Treadwell
Postoperative Intensive Pulmonary Care, Dr. Hilary H. Timmis

FUTURE CALENDAR

April 25, 1972
CIRCUIT COURSE, COLUMBUS

May 1-5
NEPHROLOGY INTENSIVE COURSE

May 8-11
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

NEW MEMBERS

ELLIOTT, CHARLES MCCARLEY. Born Ripley, Miss., June 6, 1943; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1968; interned Pensacola Hospitals Program, Pensacola, Fla., one year; elected Oct. 1971 by North Mississippi Medical Society.

RUSSELL, JAMES RANDLE. Born Houston, Miss., Oct. 21, 1939; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1964; interned Wilford Hall USAF Hospital, San Antonio, Tex., one year; ophthalmology residency, University Medical Center, Jackson, Miss., July 1, 1968-June 30, 1971; elected Nov. 1971 by South Mississippi Medical Society.

AAOS Sponsors Course on Knee in Sports

The American Academy of Orthopaedic Surgeons' Committee on Sports Medicine will sponsor a postgraduate course on The Knee in Sports, May 29-31, at the Holiday Inn of Callaway Gardens, Pine Mountain, Ga.

The course is under the direction of committee Chairman, Dr. Jack C. Hughston, orthopaedic consultant, Auburn University athletic department and Martin Army Hospital, Fort Benning.

Invited to attend the sessions, comprised of a series of panel discussions, are orthopaedic surgeons with special interest in the care of the athlete and other interested physicians and athletic trainers.

A sophisticated course on the knee, the sessions will offer in-depth panel discussions on the meniscus, extensor mechanism, fractures about the knee, acute ligament tears, and old ligament tears.

The faculty of 21 physicians includes national authorities in the field of sports medicine from 12 states and Canada. They will discuss, agree and disagree with the various aspects of each major area. Audience participation will be encouraged.

For application forms and further information, contact Dr. Hughston, 1315 Delauney Avenue, Columbus, Ga. 31901, or the American Academy of Orthopaedic Surgeons, 430 North Michigan Avenue, Chicago, Ill. 60611.

Pre-Sate ®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

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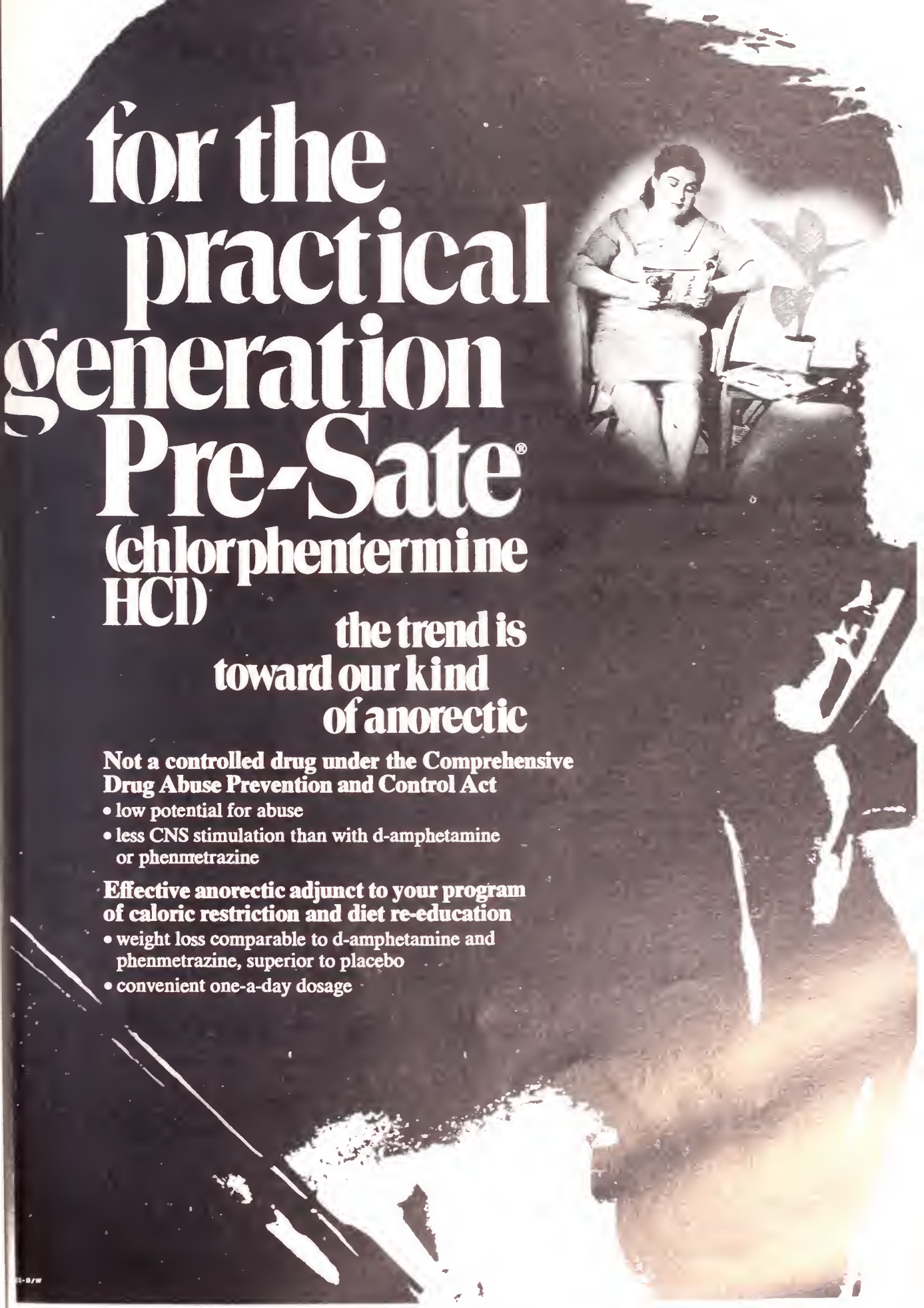
the trend is toward our kind of anorectic

Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage



Pre-Sate® (chlorphentermine HCl)...the increasingly [illegible] appetite suppressant

DEATHS

SMITH, CARL A., JR., M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1953; interned St. Joseph Hospital, Memphis, Tenn., one year; died Mar. 25, 1972, age 52.

PERSONALS

ZED ADYELOTT, JR. of Biloxi is moving his office from the Bolton-Middleton Clinic to 1404 Irish Hill Drive. Dr. Adyelott is in general practice.

JIM C. BARNETT, JR., of Brookhaven and Mrs. Barnett attended a recent American Academy of Family Practice workshop in Nassau.

FRANK W. BOWEN of Carthage, WILLIAM E. BOWLUS of Jackson, JAMES V. FERGUSON, JR., of Greenwood, and M. BECKETT HOWORTH, JR., of Oxford have been appointed to the Medical Alumni chapter of the University of Mississippi Alumni Association board of directors for three year terms.

JACK B. CAMPBELL, HENRY B. TYLER, W. GRANVILLE TABB, JR., ROBERT D. SLOAN, and OTTIS G. BALL of Jackson have been named physician advisors to the Central Chapter of the Mississippi Society, American Association of Medical Assistants.

DAWSON B. CONERLY, JR., of Hattiesburg was elected charter president of the newly formed H. William Scott, Jr. Society of surgeons who have trained at Vanderbilt University.

ROBERT L. DONALD of Pascagoula has been named a director to the advisory board of the First National Bank of Jackson County.

C. MIMS EDWARDS announces the moving of his office from 302 Medical Towers in Jackson to 110 Nixon Street in Biloxi.

SIDNEY GRAVES of Natchez has been appointed to the Jefferson Davis Hospital Board of Trustees by the Adams County Board of Supervisors.

CHARLES E. GRISSOM and HECTOR P. HARRELL have associated with the Laird Clinic of Union. Dr. Harrell is in general practice and Dr. Grissom, a UMC neurosurgery resident, will be at the hospital on a part-time basis through July 1. In July, ISAAC V. ALTMAN of Ft. Worth will also join the staff.

JAMES D. HARDY of Jackson and UMC was guest speaker at a dinner meeting of the Rush Foundation Hospital in Meridian. Dr. Hardy discussed "Peripheral Arterial Disease."

JOHN HARRIS of Okolona has been appointed to the Board of Okolona Community Hospital.

EDGAR D. JOHNSON, ANDREW J. CARROLL, DAWSON B. CONERLY, GERALD P. GABLE, and JOSEPH E. VARNER, JR., of Hattiesburg are new physician advisors to the Hattiesburg chapter of the Mississippi Society of the American Association of Medical Assistants.

W. CECIL JOHNSON, general surgeon, has associated with the Meridian Surgical Group, WILLIAM ANDERSON, JR., WILLIAM ANDERSON, III, and HUGH S. RAYNER.

JOHN J. KLUCK of Hattiesburg announces the removal of his office from 713 Arledge Street to Medical Plaza, Suite 106, at 2601 Mamie Street. Dr. Kluck is in general practice.

C. JAMES LEWIS of Jackson has been appointed to the Jackson Municipal Separate School Board by the Jackson City Council.

HENRY P. MILLS of Jackson was guest speaker at a vision clinic for school nurses and their paramedical personnel held in Jackson recently. Dr. Mills is an ophthalmologist.

MERWIN B. MOORE of Columbia has been elected president of the James D. Rives Surgical Society.

R. JENNINGS OWENS of Woodville served as chairman of the 1972 Mississippi Easter Seal Campaign for Wilkinson County.

JAMES A. PITTMAN, general surgeon, has associated with the Medical Center, 535 N. 5th Avenue in Laurel.

RICHARD RUSSELL and SAM CREEKMORE, native Mississippians completing internship in Savannah, Ga., will begin practice in New Albany around August 1.

LEO SCANLON of Vicksburg was among 25 U. S. pathologists chosen by the Department of Justice to attend a seminar in advanced forensic pathology studies which was held in Memphis.

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A gratifying announcement about Empirin® Compound with Codeine



You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



When you select this familiar antibiotic for IV infusion you have available a broad dosage rang that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyci hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in n less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

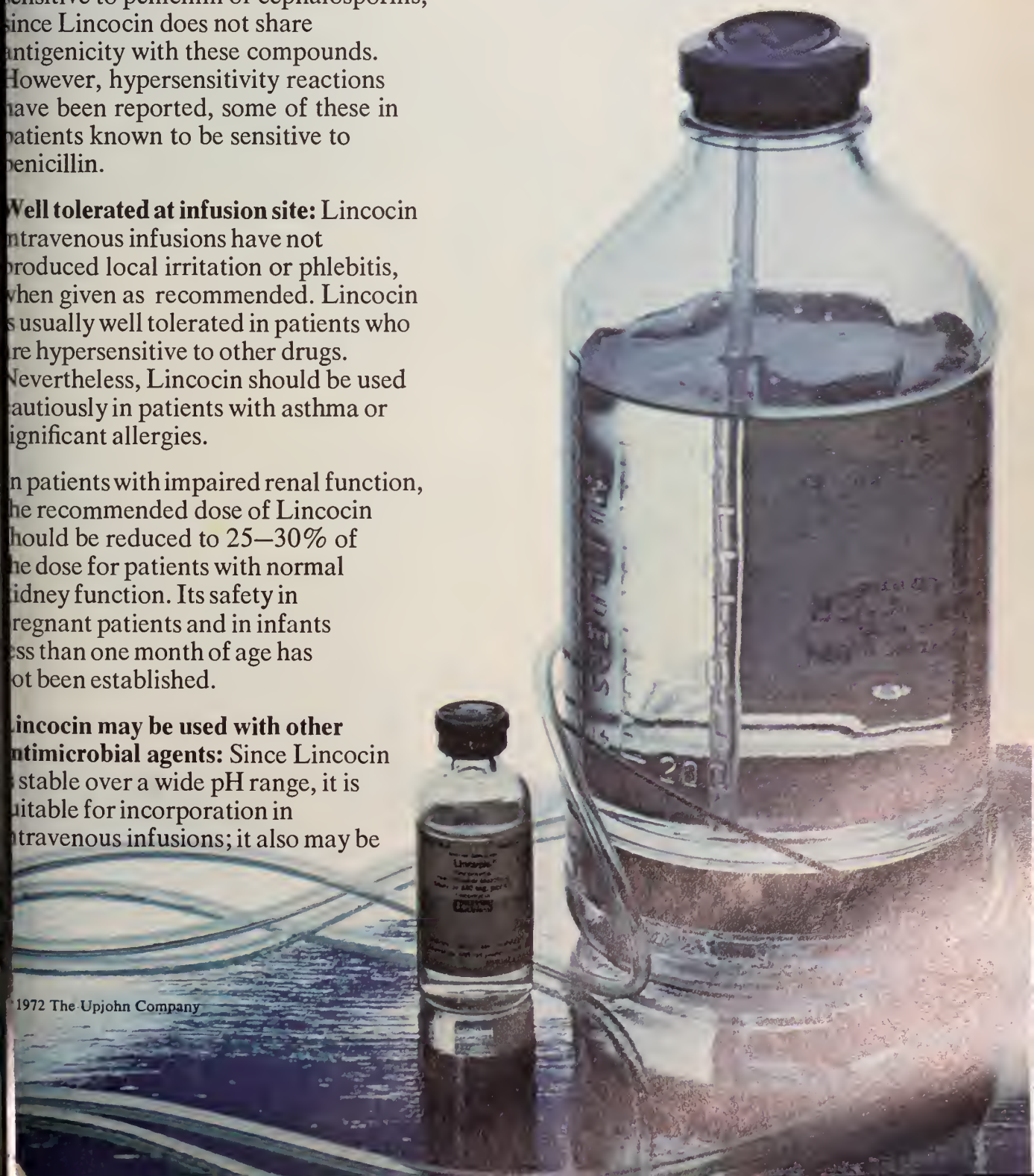
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonikal treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatm
Skin and mucous membranes—Skin ras urticaria, vaginitis, and rare instances of foliative and vesiculobullous dermatitis h been reported. *Liver*—Although no direct lationship to liver dysfunction is establish jaundice and abnormal liver function t (particularly serum transaminase) have b observed in a few instances. *Cardiovasc* —Instances of hypotension following par teral administration have been report particularly after too rapid IV adminis tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more adm istered IV, dilute in 500 ml of fluid administer no faster than 100 ml per ho *Special senses*—Tinnitus and vertigo h been reported occasionally. *Local reacti* —Excellent local tolerance demonstrated intramuscularly administered Linco (lincomycin hydrochloride). Reports of p following injection have been infrequ Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distil water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500* Capsules—bottles of 24 and 100. *Ste Solution, 300 mg per ml*—2 and 10 ml v and 2 ml syringe. *Syrup, 250 mg per 5* —60 ml and pint bottles.

For additional product information, cons the package insert or see your Upjo representative.

MED B-6-S (KZL-7) JA71-16

The Upjohn Company
Kalamazoo, Michigan 49001

Upjoh

JACK SENTER of Belmont was elected vice president of the Mid-South Medical Association at the 83rd annual meeting held in Memphis.

JAMES A. WATTS announces the opening of his office for the practice of general psychiatry in Suite 9, 106 S. Washington Street, Starkville.

CECIL T. WILLIAMS, JR., of Laurel was guest speaker at a recent meeting of the Laurel District Nurses Association. Dr. Williams showed a filmstrip on "The Normal Heart and the EKG."

LETTERS

SIRS: I am compiling case reports of allergic reactions to biting insects, i.e., mosquitos, fleas, kissing bugs, bed bugs, gnats and flies—including horsefly, sandfly, deerfly. I am also interested in reactions to fire ants.

I would like physicians to supply me with case reports of those patients who have had reactions to such insects. Include in your reports, the history of the type of reaction and complications if any; the immediate treatment; if desensitization were attempted, what were the results?

CLAUDE A. FRAZIER, M.D.
4-C Doctors Park
Asheville, N. C. 28801.

Med Assistants Hold Terminology Course

Central Chapter of the Mississippi Society of the American Association of Medical Assistants is currently offering a course in "Medical Terminology" to all paramedical personnel in Hinds, Rankin, Simpson, Smith, Madison, Leake, Scott, and Yazoo Counties. Ben R. Clower, Ph.D., associate professor of anatomy, University of Mississippi School of Medicine, is instructor.

Mrs. Mary Adeline Pace, education committee chairman, stated, "The American Association of Medical Assistants administers a certification examination in June of each year. This course helps registrants prepare for certification. It is not necessary to be a member of AAMA, however, to take either the course or the certification examination."

The class meets once a week for a ten-week period and began on April 11, in Room S-123 at the University Medical Center.

All communications should be addressed to Mrs. Marjorie Everitt, registration chairman, c/o Dr. Marvin H. Jeter, Jr., University Medical Center, Jackson, Miss. 39216.

MECO Plans Orientation Conference

The SAMA-MECO program will hold an orientation conference on Thursday, May 18, in conjunction with the JCAH workshop scheduled for May 18-19.

The conference will begin at 6:30 p.m. in the University Medical Center's School of Nursing Auditorium. Guest speaker will be Dr. William E. Lotterhos of Jackson, immediate past president of the American Academy of Family Physicians.

All students who will participate in the 1972 MECO program will be present. Participating hospital administrators and physicians are especially invited to attend.

Dinner will be served so anyone planning to attend should notify in advance Tom Greer, MECO coordinator, University Medical Center, Jackson 39216.

MECO is jointly sponsored by the UMC chapter of SAMA, MSMA and the Mississippi Hospital Association. The conference is under the auspices of the Mississippi Regional Medical Program.

UMC Announces Graduation Activities

Dr. John A. D. Cooper, president of the Association of American Medical Colleges, will address graduates at the 16th Commencement of The University of Mississippi Medical Center on Sunday, May 28. Exercises are set for 4 p.m. at the Mississippi Coliseum.

Dr. Porter L. Fortune, Chancellor of The University of Mississippi, will award degrees to candidates from the School of Medicine, the School of Nursing and the Graduate School. Some 80 students expect to receive the doctor of medicine degree this year, the largest class in the school's history.

During the ceremony, recipients of the prestigious Leathers Medal and Faculty Award, highest medical and nursing school honors, will be announced.

Graduates and their families will begin graduation activities with a Sunday morning breakfast. Chancellor and Mrs. Fortune will host the traditional reception at 2 p.m. in the School of Nursing Auditorium prior to Commencement exercises.

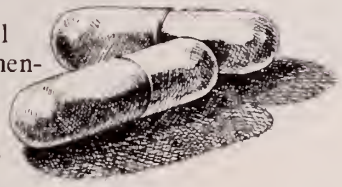
Because you practice medicine in the Magnolia State...



ou carry one of the heaviest
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number of patients with
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elps reduce xiety-related G.I. symptoms

atient may blame his attacks of gastritis or denitis on "something he ate" but contributfactors may be his job, rital problems, financial rries or some other unmened source of stress and essive anxiety that cerbated the condition. ether it is "something te" or "something eating him," adjunctive rax can help. Librax offers both the antianxiety on of Librium® (chlordiazepoxide HCl), that can relieve excessive anxiety, and the dependable cholinergic action of Quarzan® (clidinium Br), can help reduce gastrointestinal hypermotility hypersecretion.



Patient-oriented dosage — up to 8 capsules daily in divided doses

For optimal response, dosage can be adjusted to suit patient needs—1 or 2 capsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

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Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

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rnings: Caution patients about possible combined effects alcohol and other CNS depressants. As with all CNSng drugs, caution patients against hazardous occupations iring complete mental alertness (*e.g.*, operating machinery, ing). Though physical and psychological dependence have ly been reported on recommended doses, use caution in inistering Librium (chlordiazepoxide hydrochloride) to wn addiction-prone individuals or those who might increase ge; withdrawal symptoms (including convulsions), following ntinuation of the drug and similar to those seen with barrates, have been reported. Use of any drug in pregnancy, tion, or in women of childbearing age requires that its ntial benefits be weighed against its possible hazards. As all anticholinergic drugs, an inhibiting effect on lactation occur.

autions: In elderly and debilitated, limit dosage to smallest tive amount to preclude development of ataxia, oversedaor confusion (not more than two capsules per day initially; ase gradually as needed and tolerated). Though generally ecommended, if combination therapy with other psychoics seems indicated, carefully consider individual pharmagic effects, particularly in use of potentiating drugs such as O inhibitors and phenothiazines. Observe usual precautions esence of impaired renal or hepatic function. Paradoxical tions (*e.g.*, excitement, stimulation and acute rage) have t reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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Emergency Care Course Slated

An advance practical course in emergency care and transportation of the sick and injured will be held June 14-16 at the UT Wassell Randolph Student Center, 800 Madison Avenue in Memphis.

Designed for ambulance attendants, firemen, policemen, emergency squads, volunteer rescue squads and others interested in emergency care, the course is sponsored by the American Academy of Orthopaedic Surgeons Committee on Injuries in conjunction with the Tennessee Trauma Committee, ACS, UT Medical school and Memphis Fire and Police Departments.

Tuition is $50.00 according to course chairman Dr. Dan J. Scott, Jr. of Memphis.

For advance registration before the June 1 deadline write, Dr. Scott at 188 Bellevue Blvd., Suite 101, Memphis 38104.

Cardiologists Opt for Low-Cholesterol Meals

The American College of Cardiology, the national medical society for heart disease specialists, and the Hilton Hotels Corporation joined to feature low-cholesterol, low-fat and low-calorie meals during the College's 21st Annual Scientific Session Mar. 1-5 at the Conrad Hilton Hotel, Chicago. College and Hilton officials hope their efforts will form a pattern for more healthful business lunches and dinners at conventions and other gatherings elsewhere.

The College, whose 5,000 members include most of the nation's cardiologists, heart surgeons and cardiovascular research scientists, is the first medical specialty society to adopt the practice of serving such meals at a national scientific meeting. Low-cholesterol, low-fat and low-calorie diets are believed to contribute to the long range prevention of heart diseases.

The joint venture, it is hoped by both the College and the hotel corporation, will have impact beyond this meeting of physicians. The hotel chain's food service executives have suggested it will develop such meals for medical and non-medical conventions at other Hilton hotels and eventually "on demand" in its public restaurants.

Dr. Forrest H. Adams, Los Angeles, College president, predicts that the joint effort "may help break the logjam of reluctance toward adoption of changes in the American diet that will help prevent heart disease." Dr. Adams, a specialist in childhood heart disease, is chairman of the Division of Cardiology, Department of Pediatrics at the University of California Los Angeles Medical Center.

In a statement issued by the Hilton Hotels Corporation, Carl T. Mottek, Senior Vice President for Food and Beverage, said "we are definitely enthusiastic about the possibility of using specially created low-calorie and low-cholesterol menus both for banquets and for public dining rooms. We hope that as the choice is made apparent, more and more of our convention visitors will find interest in this concern for their good health. We are pleased at the opportunity to move in this direction in cooperation with the American College of Cardiology and to plan expansion in our hotels beyond this meeting."

The special menus were based on the elimination of all meat fats, egg yolks, butter and pan drippings in cooking and baking, according to Dr. Zelis. Among specific directions to the hotel were:

—The use of an unsaturated margarine that has as its major constituent a liquid safflower or corn oil. This margarine is being used in the preparation of all pastries, gravies and sauces as well as at tables. Specifically ruled out were margarines based on "vegetable oil" or coconut oil.

—The addition of lecithin, a naturally occurring unsaturated fat, as a substitute for egg yolk. This imparts to foods the consistency and some color of yolk.

—All meats to be carefully trimmed of all fats prior to cooking and the use of lean meats specified. Cold cuts were not acceptable, especially pressed meats. Chickens to be cooked or fried only after skins were removed.

—The use of skimmed milk instead of regular milk. A combination of skimmed milk and powdered milk, mixed at least a day before serving, to be used as a substitute for cream. This makes, Dr. Zelis said, "a coffee lightener with the consistency of cream."

—Desserts are not to include chocolate or ice cream. Most of the desserts decided on were fruit dishes.

In commenting on the ACC-Hilton menu changes, Dr. Zelis emphasized that "we are very serious about changing the composition of convention luncheons from the dangerous atherogenic preparation usually suggested to something that will be healthful for the American population as a whole. We as physicians must certainly set examples."

Dr. Zelis said he made menu suggestions with the idea in mind that excellent tasting and well prepared gourmet diets could be served to convention-goers that are also healthful and more than just palatable.

IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

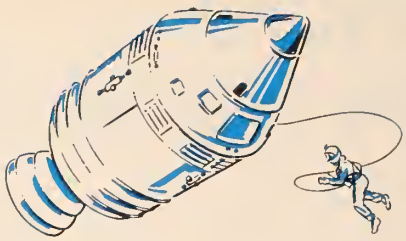
MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

Lumbar Disc Disease—A Twenty-Year Clinical Follow-up Study. Edited by Blaine S. Nashold, Jr., M.D., and Zdenek Hrubec, Sc.D. 139 pages with illustrations. St. Louis: The C. V. Mosby Company, 1971. $16.50.

Lumbar disc disease is a complex and variable malady. Nashold and Hrubec assisted by more than 40 Veterans Hospital medical consultants have attempted to develop some concept of the natural history of lumbar disc disease by reviewing the medical and hospital records of more than 400 disc patients treated in the military service in 1944-1945 and comparing these findings to the results of survey and examinations of these same men 20 years later. In addition it was hoped to compare the efficiency of surgical versus conservative treatment as related to long term disability and recurrence of disc trouble. Due to the multitude of variables inherent in such a survey, the study failed to accomplish the two major objectives. A definitive pattern of the natural history of disc disease did not develop, and a critical comparison of surgical versus conservative management could not be made.

Although much of the data was interesting, little of useful value evolved from this study. Patients with lumbar disc disease did report a higher incidence of cervical and thoracic disc problems, but the question of familial tendency of lumbar disc disease was not resolved. As expected, the extent of permanent disability could not be predicted on the basis of clinical findings during the acute phase of the disease.

Although recurrence rates and long term disability were about equal for both surgical and conservatively treated groups, a valid comparison could not be made due to criteria differences in selecting patients for surgery. Even comparison of radiographic reports 20 years apart yielded little of value other than supporting the well known information that lumbar disc problems are often associated with other degenerative changes in the spine.

It was of interest to note that although 92.3 per cent of the surveyed patients were employed and 52.1 per cent had not changed employment because of their disc problem, 85.1 per cent of these patients were receiving some disability compensation or pension.

This book represents the yield of a heroic undertaking requiring hundreds of hours of concentrated effort. The methodology could not surmount the overwhelming number of variables. In short, the study raised many more questions than it answered. However it more than adequately emphasized the difficulties associated with retrograde studies of this type.

The book is of limited value to those interested in disc disease. It has little to offer the clinician, or practitioner.

BERNARD S. PATRICK, M.D.

Medical Interviewing—A Programmed Manual. Second Edition. 131 pages with illustrations. By Robert E. Froelich, M.D., and F. Marian Bishop, Ph.D. Saint Louis: C. V. Mosby Company, 1972. $5.00.

This soft-back book purports to facilitate the obtaining of a medical interview. The authors suggest that their technique will permit a better interview and give increased satisfaction to the practitioner.

This book can be recommended to the seasoned practitioner who wants to improve the quality of his history taking. It will be less useful to the uninitiated and cannot be recommended as a single source for medical students first learning to interview patients.

This manual is fairly priced, and it is easy to read. The method of presentation is that of programmed instruction and this adds to its interest and clarity.

At a time when increasing reliance is placed on the laboratory or technical aspects of our art, it is refreshing to find a little book dedicated to that all important aspect of patient care—the obtaining of an adequate history.

ROBERT E. TYSON, M.D.

Southern Ob-Gyn Seminar Scheduled

The annual Southern Obstetrical and Gynecological Seminar will be held at the Grove Park Inn, Asheville, N. C., July 23-28.

Subjects to be covered include broad fields of obstetrics and gynecology.

For further information, write Dr. George T Schneider. The Ochsner Clinic. 1514 Jefferson Highway, New Orleans, La. 70121.

Blue Plans Hold Annual Meeting

The twenty-fifth anniversary of Mississippi Blue Cross-Blue Shield was the occasion for the announcement that almost one million Mississippians are now served by the Mississippi Plan through regular membership contracts and government programs.

At the annual meeting of the directors of the Mississippi Hospital and Medical Service in Jackson, it was also revealed that over $125 million was processed into the health care economy in 1971 by this Mississippi organization.

Benefits paid to hospitals and doctors for members health care totaled $38,668,500. This represented the processing of 314,000 hospital and doctors' bills and covered 585,100 days of hospital care.



New board members appointed to Mississippi Hospital and Medical Service at the annual meeting held in Jackson were, left to right, Dr. Louie F. Wilkins of Brookhaven and C. B. Read, Lexington. John Holland, right, was re-elected Chairman of the Board of Mississippi Blue Cross-Blue Shield.

As intermediary of the hospital part of Medicare, Mississippi Blue Cross-Blue Shield processed 158,650 claims in 1971 with benefits of $48,143,700 for the Department of Health, Education and Welfare.

Payments processed for the Mississippi Medicaid Commission came to $38,218,000 represented by 3,490,400 different claims.

In tracing the 25 years of growth, Joe C. Woosley, president, pointed out that to get a true perspective of Blue Cross-Blue Shield's fast growing impact on both the health care and economy of Mississippi it is necessary to go back through the years and look at the state as it existed in the 1940's and early 1950's.

In those days Mississippi was largely a rural community with hospitals few and far between. Farm families were finding it increasingly difficult to pay their hospital and medical expenses, and the health plans in existence were both inadequate and temporary.

To correct this situation the Mississippi Farm Bureau Federation began to investigate the possibility of developing a strong pre-payment health program, and a committee was formed to evaluate the overall health needs of Mississippians.

From the work of this committee, the Mississippi legislature of 1946 created the Commission on Hospital Care for the promotion of a prepayment hospitalization plan.

At the 1946 convention of the Mississippi Hospital Association, a committee was formed to organize a Blue Cross Hospitalization Plan in Mississippi.

Then, on July 18, 1947, the Executive Council of the Mississippi State Medical Association met to hear details of the new medical contract to be offered by the newly formed Blue Cross-Blue Shield Plan in Mississippi.

Subsequently, the plan was unanimously approved by both groups, and on Oct. 16, 1947, bylaws were adopted, a board of directors was elected, and the new corporation known as Mississippi Hospital & Medical Service was chartered.

The first contracts were issued Jan. 15, 1948. During the same year the legislature enacted a law placing the health care plan under the regulations of the Department of Insurance.

Every year has seen growth in the organization reaching a pinnacle of 500,000 regular members in 1971.

Officers re-elected to serve for another year were John D. Holland of Jackson, and Lowery A. Woodall of Hattiesburg.

Other action taken at the meeting included the election of two new board members: Dr. Louie F. Wilkins, Brookhaven, and C. B. Read, administrator, Holmes County Community Hospital, Lexington.

Other members of the board of directors in addition to John Holland and Lowery Woodall were: T. W. Crowley, Brookhaven; Reuben S. Johnson, Meridian; Fred C. Lavender, Macon; Paul J. Pryor, Jackson; Dr. G. Spencer Barnes, Columbus; Dr. R. E. Caldwell, Baldwyn; Dr. Stanley A. Hill, Corinth; Dr. S. H. McDonnieal, Jr., Jackson; Dr. Walter H. Simmons, Jackson; T. L. Crosby, Picayune; Shouphie Habeeb, Vicksburg; Purser Hewitt, Jackson; F. H. Nance, Cleveland; and W. O. Stanley, Jackson.

"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

– George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

Opinion

Results of a questionnaire to 7000 physicians:

82.8%
Physicians should play a role

78.3%
Independent scientists should play a role

69.8%
Medical academicians should play a role

Opinion & Dialogue

Dialog

Should nongovernment scientists and physicians play a role in drug regulation?

Doctor of Medicine

Herbert L. Ley, Jr.,
M.D., M.P.H., Formerly
Commissioner, F.D.A.
(1968-1969)
Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations,



state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of
the medical commu
and federal regulator
will often be represent
simplistic and somev
misleading terms.

One illustration of
misuse of the media in
regard is the recall of
coagulant drugs sev
years ago. This FDA a
was given publicity by
press and television
went far beyond its
able importance. The r
was a very uncomfort
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informed of the actio
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in most states they
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worried patients.

The practitioner ca
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could notify the physic
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that he and the physi
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practitioner receives.

All of this leads bac
my opening contentio
drug regulation is to b
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to the realities of cli
practice, a better metho
communication and f
back must be developed
tween the nongovernm
tal medical and scien
communities and the r
latory agency.

ue

Maker of Medicine

Henry W. Gadsden,
irman & Chief Executive
fficer, Merck & Co., Inc.



n my opinion, it is the ponsibility of all physi- ns and medical scientists ake whatever steps they nk are desirable in a law- l regulation-making cess that can have far- ching impact on the ctice of medicine. Yet ny events in the recent t indicate that this is happening. For exam- , it is apparent from g efficacy studies that NAS/NRC panels gave e consideration to the dence that could have n provided by practic- physicians.

here are several current elopments that should rease the concern of cticing physicians about g regulatory affairs. One he proliferation of mal- ctice claims and litiga- . Another is the effort government to establish relative efficacy of gs. This implies that if hysician prescribes a g other than the "estab- ed" drug of choice, he be accused of practic- something less than t-class medicine. It ld come perilously e to federal direction of medicine should be cticed.

n order to minimize this l of arbitrary federal ion, a way must be d to give practitioners a voice and represen- tation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in *proving* precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted *prima facie* as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings—where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

The Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

Burroughs Wellcome Dedicates Building

Ceremonies were held recently at Research Triangle Park, N. C., dedicating the new Corporate Headquarters and Research Laboratories of Burroughs Wellcome Co. The building, located on the highest point of the 5,000 acre scientifically-oriented park, is situated between the North Carolina communities of Raleigh, Durham, and Chapel Hill.

Program speakers at the dedication included Luther H. Hodges, former Secretary of Commerce and Governor of North Carolina and the prime mover for the development of the Research Triangle Park; Dr. George H. Hitchings, vice president of research; Fred A. Coe, Jr., president of Burroughs Wellcome Co.; and the honored guest speaker, The Right Honorable The Lord Franks, Chairman of The Wellcome Trust. Lord Franks was British ambassador to the United States from 1948 to 1952.

The Wellcome Trust is the sole owner of the entire international enterprise called The Wellcome Foundation Limited, of which Burroughs Wellcome Co.—established in New York in 1906—is a subsidiary. Profits are used for the support of medical research around the world. To date the Trust has distributed over $50,000,000. In addition, an annual expenditure of nearly $20,000,000 is made by the worldwide group for research and development carried on within their own laboratories.

The new B. W. building, designed by Paul Rudolph—celebrated American architect and former dean of the Yale School of Architecture—has already received international acclaim. The five-story, S-shaped structure contains 140 laboratories and support activity rooms with 300,000 square feet of floor space; it provides a working environment for more than 400 people—275 of whom are engaged in more than a dozen scientific disciplines related to pharmaceutical research. Service units include a library and technical data center, an auditorium, and a cafeteria. The exterior of the building, covered with beige stone aggregate, is terraced with protruding laboratories and offices.

Natural lighting for each floor comes through a series of skylights and solar-glass windows which draw light deep into the interior of the building.



Burroughs Wellcome Co. recently dedicated its new corporate headquarters and research laboratories at Research Park, N. C. The modern and functional building was designed by architect Paul Rudolph.

International Surgeons Plan Rome Meeting

The International College of Surgeons announces its 18th Biennial International Congress to be held in Rome, Italy, May 28-31, 1972.

Headquarters hotel will be the Hotel Cavalieri Hilton and general program chairman is ICS president-elect, Professor Paride Stefanini.

Fifty-four nations will be represented in the program and governors' council meetings. The United States has the largest membership of any single nation.

In addition to papers covering all phases of surgery, the college will offer training courses in many areas including organ transplantation, vascular, pulmonary, gastric, gynecological, orthopaedic, cancer, cardiac, and neurosurgery, May 25-27.

Surgeons interested in taking one of the three-day courses should contact Professor Stefanini in Rome. A registration fee is required and diplomas will be offered.

Dr. Lawrence W. Long of Jackson is serving his last term by law as treasurer of the International College of Surgeons.

Dr. James F. Arens Appointed New UMC Anesthesiology Department Head

Dr. James F. Arens, anesthesia director at Ochsner Foundation Hospital in New Orleans, has been named anesthesiology professor and department chairman at The University of Mississippi School of Medicine.

Dr. Robert E. Blount, School of Medicine dean and Medical Center director, made the announcement following the March approval by the Board of Trustees, Institutions of Higher Learning.

Three other anesthesiologists, assistant professors Dr. Joseph Gabel and Dr. Donald Glass, and instructor Dr. Dexter Nettles, will also join the faculty. All four appointments are effective July 1.

Dr. Arens, 38, who is also Tulane assistant professor, joined the Ochsner staff in 1966. He is currently director of inhalation therapy, recovery and operating rooms, and the intensive care unit. In 1971 he was named medical director of the School of Inhalation Therapy. A past president of the Louisiana Society of Anesthesiologists, he has served as examiner for the American Board of Anesthesiology and the American Registry of Inhalation Therapists.

The new department chairman, who succeeds Dr. Leonard Fabian, holds the M.D. degree from Creighton University in Omaha, 1959. He interned at Tripler Army Hospital in Honolulu and did his anesthesiology residency at U.S.A.F. Hospital in Swindon, England, and Travis Hospital in California. Certified by the American Board of Anesthesiology, he is a diplomate of the National Board of Medical Examiners.

Dr. Glass, a clinical fellow in anesthesia at Harvard University, and chief anesthesia resident at Massachusetts General Hospital, graduated from West Virginia University medical school, interned at the University of Pittsburgh and received anesthesia training at U. S. Naval Hospitals. He is a member of Alpha Omega Alpha, honor society and a diplomate of the National Board of Medical Examiners.

Dr. Gabel is an instructor in anesthesia at Harvard Medical School and an assistant anesthetist at Massachusetts General Hospital in Boston. He earned the M.D. degree at Ohio State University, interned and took specialty training in the Air Force subsequently serving at Keesler Air Force Base in Biloxi. Dr. Gabel is a fellow of the American College of Anesthesiologists.

The team's fourth member, Dr. Nettles, is a University of Mississippi School of Medicine graduate. He interned at Baptist Hospital in Jackson and took his residency at the University of Mississippi Medical Center and Southwestern Medical Center in Dallas, Texas.

AAP Warns About Weight Gain Drugs

The use of drugs to promote weight gain in children should be reserved for those children with serious nervous conditions causing loss of appetite and emaciation. Such drugs should be coupled with definitive therapy aimed at the underlying problem.

This warning was sounded by the Committee on Drugs of the American Academy of Pediatrics in a statement appearing in the AAP's current *Newsletter*.

"It is easy to prescribe drugs for patients asking for simple answers for complicated questions," the Committee on Drugs pointed out in its statement. "However, a parent's anxiety is not an indication for the use of drugs to promote weight gain in a normal child."

In its statement, the Committee called attention to the drug cyproheptadine, an antihistamine and serotonin inhibitor which has proven effective in promoting weight gains in numerous studies.

The Committee indicated that the original observation of weight gain was accidentally determined during a study of the antihistamine action of this drug in asthmatic children.

ACG Announces 1972 Rorer Awards Contest

The American College of Gastroenterology, in cooperation with William H. Rorer, Inc., of Fort Washington, Pa., announces the 1972 Rorer Awards Contest for the best papers in gastroenterology.

There will be two classes of awards as follows:

For the best unpublished papers in gastroenterology or an allied subject and for the best papers published in *The American Journal of Gastroenterology*.

All papers submitted must represent original work in gastroenterology, or an allied subject and must not have been previously presented at meetings of any national society.

The contents of the papers may be clinical or basic science. Clinical papers must not be case records, but controlled clinical work. The length of a paper is no criterion for originality or value.

All entries must be typewritten in English, double-spaced on one side of the paper, and submitted in six copies.

The winning entry will be selected by the Research and Education Committee of the American College of Gastroenterology and the awards will be made at the Annual Convention Banquet of the College, to be held in Montreal, Canada, in October 1972.

All papers selected for awards become the property of the American College of Gastroenterology, and the decision of the judges will be final.

Should none of the papers submitted meet the standards set by the Committee, the Committee reserves the right to withhold the making of any award.

The recipients of the first two prizes will be given the opportunity of presenting their papers in person at the Annual Meeting of the College in October of 1972.

All entries must be received no later than June 15, 1972, and should be addressed to the Research and Education Committee, American College of Gastroenterology, 299 Broadway, New York, N. Y. 10007.

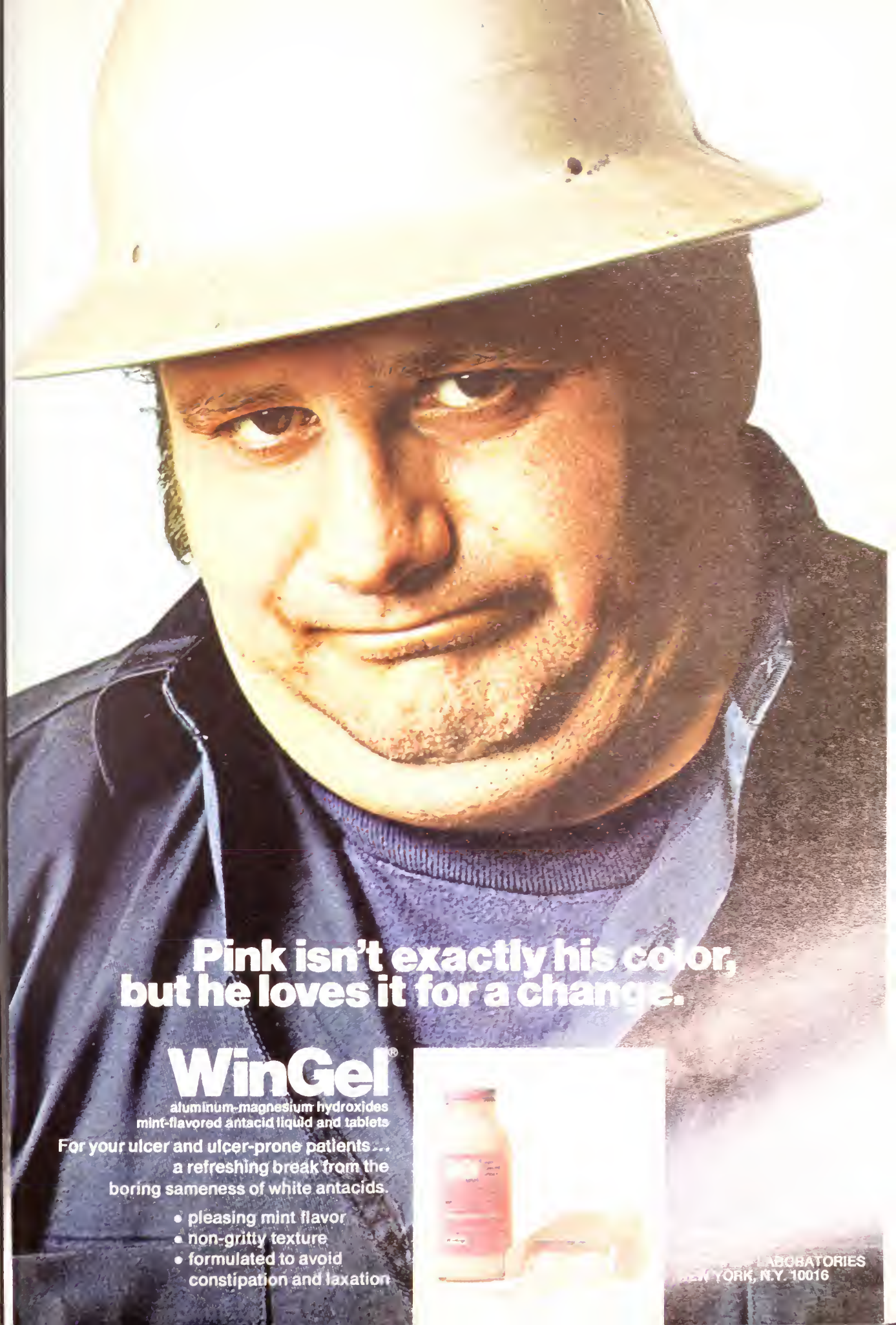
Gastroenterology Course Set

The Annual Course in Postgraduate Gastroenterology of the American College of Gastroenterology will be given at the Hotel Bonaventure in Montreal, Canada, Oct. 19-21, 1972, immediately following the 37th Annual Convention of the College which will also be held there on Oct. 16-18.

This will be a "Problem Oriented Postgraduate Course" and will be structured along the lines that would make it most useful for the audience to apply the information directly to patient care and help them with their problem oriented records. The topics to be covered will be: physiology or basic mechanism; evaluation methods for the examination of organs; and panel discussions on: (a) The best plan to collect the data base for the diagnosis and the degree of certainty, i.e. possible, probable, certain; what examinations are superfluous and add expense but not information. (b) The best plan for and evaluation of therapy. (c) Anticipated complications.

The faculty for the Course will include many distinguished teachers from both the United States and Canada.

Further information and enrollment may be obtained from: The American College of Gastroenterology, 299 Broadway, New York, N. Y. 10007, U. S. A.


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Berkeley Announces Postgraduate Courses

The Maternal and Child Health Program of the University of California School of Public Health at Berkeley announces postgraduate courses of instruction for pediatricians, obstetricians, and other physicians interested in receiving training in the field of Maternal and Child Health. These programs all lead to the degree of Master of Public Health. Tax-exempt Fellowships are available, consisting of support for the trainee and his dependents, tuition and fees.

Program areas at the present time include nine-month programs in maternal and child health, health of school-age children and youth, and family planning. Twenty-one month programs in care of handicapped children, comprehensive health care and perinatology are also available.

Applications are now being accepted for the group entering September, 1973. For information, write to Dr. Helen M. Wallace, School of Public Health, University of California, Berkeley, Cal. 94720.

Miss. Took Three AMPAC Awards

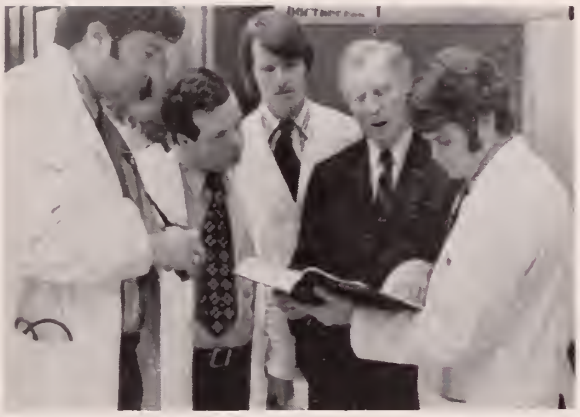
At the annual AMA-American Medical Political Action Committee Public Affairs Workshop in Washington, D. C., Mississippi won two first place and one third place membership awards.

The state committee, which gained some 700 members for 1971, took first in most dollars per physician and ratio of members to potential. The third place award was in all-events competition.



Dr. J. Dan Mitchell of Jackson, right, MPAC chairman, shows the award plaque Mississippi won in national AMPAC competition to MSMA president, Dr. Arthur E. Brown of Columbus.

Dr. George Thorn Visits UMC



Dr. George W. Thorn, second right, Hersey professor of the theory and practice of physic, and Samuel A. Levine professor of medicine at Harvard, was visiting professor of medicine at The University of Mississippi School of Medicine in March. Here the internationally-known physician talks with UMC medicine residents, from left, Drs. Randy White, Mack Gorton and Bill Causey, and medical sophomore Tom Greer, at right.

Cancer Institute Asks Physicians' Aid

The cooperation of physicians is requested in the referral of patients with cancer of the oral cavity, pharynx, larynx, or paranasal sinuses for studies being conducted by the National Cancer Institute's Surgery Branch at the Clinical Center, National Institutes of Health, Bethesda, Md.

Patients selected for admission and treatment will be included in an adjuvant-therapy protocol where the treatment modalities of surgery, irradiation, and chemotherapy will be combined in such a manner as to determine the feasibility of such a therapeutic approach and its potential for decreasing the incidence of local recurrence and metastases.

Post-treatment studies are planned which will include cooperative follow-up between the referring physician and the National Cancer Institute.

Physicians interested in having their patients considered for admission to these studies may write or telephone: Dr. Alfred S. Ketcham, Clinical Center, Room 10-N-116, National Institutes of Health, Bethesda, Md. 20014. Telephone 301-496-4164.

Cardiac Instrumentation Conference Planned

The National Conference of Instrumentation and Hazards in Cardiac Care scheduled for Monday and Tuesday, May 22-23, at the Towsley Center for Continuing Medical Education in Ann Arbor, Mich., is designed for physicians and surgeons, especially those involved in the safety as well as the use of electrical and/or electronic equipment in the office or hospital.

The conference, which has four sections—Electrical Hazards, Equipment Selection and Maintenance, Effective Utilization of Instruments, and New Trends in Patient Care Systems—is chaired by Dr. Henry L. Green, Detroit cardiologist and chairman of the Instrumentation Study Group, Inter-Society Commission on Heart Disease Resources.

Sponsors are the Council on Clinical Cardiology of the American Heart Association and the Michigan Heart Association, and the conference will be partly financed by the Regional Medical Programs Services.

Dr. Green said, "This conference takes a new road to the problems of patient care—it offers a systems approach—while the last national conference in September 1970, dealt with the various instruments in use."

The multi-disciplinary program is designed to appeal to those involved in guarding against the potential or real hazards of electrical equipment used on patients, including biomedical engineers, hospital administrators, hospital maintenance supervisors, manufacturers' service representatives, nursing directors and supervisors.

For more information, contact the Michigan Heart Association, P. O. Box LV-160, Southfield, Mich. 48076, (313) 557-9500.

Among the faculty are: Drs. Eliot Corday, clinical professor, University of California School of Medicine, Los Angeles; Joel J. Nobel, scientific director, Emergency Care Research Institute, Philadelphia; Irwin Schatz, associate professor, Heart Station, University of Michigan Medical Center; and Arnold Weissler, chairman, department of medicine, Wayne State University.

Dr. Paul N. Yu, president-elect of the American Heart Association and head of cardiology at the University of Rochester, N. Y., will discuss the "Total Management of the Coronary Patient," including the pre-hospital phase of infarction, early management and referral of special problems.

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Currently, the increasing frequency of resistant organi is a limitation of the usefulness of antibacterial agents cluding the sulfonamides, especially in the treatmen chronic and recurrent urinary tract infections.

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Contraindications: Hypersensitivity to sulfonamides, fants less than 2 months of age (except adjunctively pyrimethamine in congenital toxoplasmosis), pregna at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* has been established. Sulfonamides will not eradicate gr A streptococci. Deaths associated with sulfonamide ministration have been reported from hypersensiti reactions, agranulocytosis, aplastic anemia and o blood dyscrasias. Clinical signs such as sore throat, fe pallor, purpura or jaundice may be early indication serious blood disorders. Complete blood counts urinalyses with careful microscopic examination sho be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired rena hepatic function, severe allergy or bronchial asthm present. In glucose-6-phosphate dehydrogenase-defic individuals, hemolysis (frequently a dose-related re tion) may occur. Maintain adequate fluid intake to p vent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocyto aplastic anemia, thrombocytopenia, leukopenia, he lytic anemia, purpura, hypoprothrombinemia, methe globinemia. *Allergic reactions:* Erythema multiforme (vens-Johnson syndrome), generalized skin eruptio epidermal necrolysis, urticaria, serum sickness, pruri exfoliative dermatitis, anaphylactoid reactions, perio tal edema, conjunctival and scleral injection, photose tization, arthralgia, allergic myocarditis. *Gastrointesti reactions:* Nausea, emesis, abdominal pains, hepat diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. re tions:* Headache, peripheral neuritis, mental depress convulsions, ataxia, hallucinations, tinnitus, vertigo, somnia. *Miscellaneous reactions:* Drug fever, chills, t nephrosis with oliguria and anuria. Periarteritis nod and L.E. phenomenon have occurred with sulfonam therapy. Sulfonamides bear certain chemical similari to some goitrogens, diuretics and oral hypoglyce agents. Goiter production, diuresis and hypoglyce have occurred rarely in patients receiving sulfonami Cross-sensitivity may exist with these agents.

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Louisiana Diabetic Camp Plans 2nd Year

The Louisiana Camp for Diabetic Children is planning its second summer of operation.

The camp is supervised by physicians from the greater New Orleans Diabetes Association and Tulane University Medical School.

Campers from Louisiana will be accepted on a first-come, first-served basis.

For more information, write Dr. Jerome R. Ryan, Associate Professor of Medicine, Tulane School of Medicine, 1430 Tulane Avenue, New Orleans 70112.

104th Will Feature Searle Medidata

As part of the combined scientific meeting of the MSMA sections on medicine, general practice and preventive medicine at the 104th Annual Session, Searle Medidata will present a program on multiphasic health testing systems.

Dr. Herbert A. Haessler of Waltham, Mass., will speak on "AMHT and the Patient." Dr. Haessler is vice president and medical director of Searle Medidata, Inc. He is an assistant clinical professor of pediatrics at Harvard and assistant clinical professor of clinical engineering at George Washington University.



Mr. Dillon



Dr. Haessler

Mr. Harry N. Dillon of McHenry, Ill., will talk about "Group Practice and AMHT." Mr. Dillon is administrator of the McHenry Medical Group. He is a member of Medical Group Management Association and the American College of Clinic Managers.

The Searle presentation will be given at about 2:00 p.m. on Wednesday, May 10 at the Grand Ballroom East of the Sheraton-Biloxi.

Dr. Davidson Is SMA Lecturer



Dr. Ezra C. Davidson, second right, this year's Southern Medical Association Lecturer, spoke at the University Medical Center in March. A native Mississippian, Dr. Davidson is obstetrics and gynecology chairman at the Charles R. Dew Postgraduate Medical School in Los Angeles, Cal. From left, he talks with medical student Dan Smith of Jackson, medical school assistant dean and obstetrics and gynecology chairman Dr. Henry A. Tiede, and Miss Marie Meglen, right, director of UMC nurse-midwifery programs.

UAB Biocommunications Department Created

A Department of Biocommunications has been created at the Medical Center of the University of Alabama in Birmingham (UAB). Chairman of the new department is Dr. Samuel G. Fletcher, according to Dr. C. A. McCallum, Jr., dean of the UAB School of Dentistry, and Dr. C. K. Meador, dean of the School of Medicine.

The new move brings together into one department the UAB's Hearing and Speech and Language Clinics, the UAB Laboratory for Biocommunications Studies, the Speech Pathology and Audiology Services of the Birmingham Veterans Administration Hospital, and the Speech and Hearing Division of UAB's Chauncey Sparks Center for Developmental and Learning Disorders.

The five speech and hearing areas were formerly united on an interim basis as the Division of Hearing and Speech. Formation of the new department and the appointment of Dr. Fletcher "further solidifies the University's programs in communications and assures all groups and specialties throughout the Medical Center that the important capabilities of the department will be available to all," according to the deans.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1972, San Francisco. Clinical Convention, Nov. 26-29, 1972, Cincinnati. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Louisiana-Mississippi Ophthalmological and Otolaryngological Society, Annual Meeting, May 11-13, 1971, Biloxi. A. V. Hays, P.O. Box 1018, Gulfport, Miss. 39501.

STATE AND LOCAL

Mississippi Academy of General Practice, Annual Meeting, July 13-15, 1972, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Mississippi State Medical Association, 104th Annual Session, May 8-11, 1972, Biloxi. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie Street, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.



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Mead Johnson Introduces Halotex

Mead Johnson Laboratories is introducing its first dermatological product, according to Dr. William M. Govier, president of the firm's Research Center.

"The product is HALOTEX (haloprogin) a new topical antifungal agent which is the result of more than nine years of research and development carried out under the direction of Mead Johnson scientists," Dr. Govier said.

"Halotex has proven effective when used as directed to treat superficial fungal infections of the skin. Halotex relieves itching, burning and scaling symptoms associated with superficial fungal skin infections and in addition to relieving the symptoms of fungal skin infections, has a fungicidal action in that it attacks and kills the organisms by breaking down their internal cell structure and thus eradicates pathogen colonies," he said.

"Studies involving more than 1,000 patients indicate the product has a high degree of safety and is relatively free from side effects. Halotex is available in two non-greasy and non-staining forms—Halotex Cream and Halotex Solution.

"Halotex is currently being tested to determine its efficacy for other skin disorders in addition to those for which it is now approved. Mead Johnson Research Center also is doing research involving other compounds which we expect to lead to the marketing of additional dermatological products in the future."

Psychopharmacology Course Planned

A course on "Psychopharmacology and the Aging Patient" will be held May 29-31, 1972, at Duke University, Durham, N. C.

The conference to discuss the clinical use of psychoactive agents and the recognition and management of psychiatric syndrome of the elderly will be given by Center for the Study of Aging and Human Development, Duke University.

For further information, write Mrs. Dorothy Heyman, Box 3003, Duke University Medical Center, Durham, N. C. 27710.

ACEP Seeks Papers and Exhibits

Two new features are planned for the fourth annual Scientific Assembly to be sponsored by the American College of Emergency Physicians in San Francisco Nov. 8-10. They are the inclusion of original scientific papers (in addition to the featured speakers) and of scientific exhibits.

Scientific papers must represent original work by the author which is directly related to some aspect of emergency care. The paper may deal with the provisions of emergency care, the improvement of such care within the emergency department or the emergency treatment of a disease. The paper may not have been previously published. Those papers that are accepted for presentation will be simultaneously considered for publication in *JACEP,* the Journal of the American College of Emergency Physicians.

Abstracts must be submitted no later than July 30, and final papers by Aug. 30, 1972.

Abstracts and information on the contents of proposed scientific exhibits should be submitted to Dr. Eugene C. Nakfoor, American College of Emergency Physicians, 241 East Saginaw, East Lansing, Mich. 48823.

ACP Taps Two Jackson Internists

Drs. Bernard H. Booth, III, and Joseph L. Glasgow of Jackson are among 283 physicians in the United States and Canada who have been granted Fellowship in the 56-year old American College of Physicians (ACP). The College dedicates itself to upgrading medical care, teaching and research through stringent standards of membership and programs of continuing education.

Dr. Hugh R. Butt, Rochester, Minn., president of the American College of Physicians and professor of medicine at the Mayo Graduate School of Medicine, University of Minnesota, said the new Fellows have earned this distinction through certification by their specialty boards, presentation of published material, evidence of scientific accomplishments and academic or hospital affiliations.

The College is one of the leading medical societies in the provision of continuing educational opportunities for its 20,000 members. A pioneer in postgraduate courses and other means for continuing education, the ACP in 1968 started periodic self-assessment examinations by which more than 25,000 physicians have already privately judged their own degree of competence so they can direct their choice of postgraduate educational programs.

Friends of Nursing Campaign Launched

The first annual Friends of Nursing Campaign will be launched in May, Anne Kibrick, Ed.D., president, National League for Nursing, New York, has announced.

The campaign is designed to raise funds to help make good nursing available to all Americans, whenever it is needed, Dr. Kibrick explained. Contributions will go to the National League for Nursing and its constituent leagues to support and expand their programs for improving the quality of nursing education and nursing service. Both national and local league projects will benefit from the drive.

The main thrust of this initial campaign will be centered in five pilot states—Alabama, Kansas, Maryland, Massachusetts, and Ohio—whose leagues for nursing will conduct statewide fund-raising drives. Contributions will be welcome from friends of nursing everywhere.

The tax-deductible contributions fall into three categories: individual, $5.00; family, $10.00; special, $20.00. Checks should be made out to the National League for Nursing and mailed to NLN headquarters, 10 Columbus Circle, New York, N. Y. 10019 or to the nearest constituent league.

Human Sexuality Program Offered

The Indiana University Institute for Sex Research announces its summer program in human sexuality to be held July 16-27.

The lecture course with special reference to the

medical aspects of human sexuality consists of medical workshops in counseling and sex education and small group discussion.

The $325 registration fee includes housing. Registration ends June 24.

For further information, write: Summer Program, Institute for Sex Research, Indiana University, Bloomington, Ind. 47401.

Dr. Hull Discusses Abortion

Dr. Calvin T. Hull, assistant professor of obstetrics and gynecology at UMC, recently participated on the two hour discussion and listener participation program on abortion on "Point, Counter Point," on Radio Station WJDX.

Appearing on the program also were Mrs. Lura Etheridge, attorney and co-chairman of the Right To Life Committee, the Reverend Canon William Todd of St. Andrews Cathedral and board member of the Clergyman Counseling Service, and Mr. Howard Lett, program director and moderator.

College of Surgeons Honors Dr. Field

Dr. Richard J. Field, Jr., Centreville, was cited for outstanding service in the field of trauma (injury) at the 50th annual meeting of the Committee on Trauma of the American College of Surgeons. The citation, presented to him at the Golden Anniversary banquet of the committee, held at Mills Hyatt House in Charleston, S. C., on April 15, reads:

"To Richard J. Field, Jr., the Committee on Trauma presents its Trauma Award in gratitude and recognition of dedicated service as a State Chairman and Section Chief.

"Dr. Field has guided the trauma program in Mississippi with the same energy and zeal which have marked his entire medical career. Appointed State Chairman in 1963, he immediately began an extensive and effective program to improve athletic standards for high school and grade school competitors. He has further distinguished himself as Section Chief of an eight-state area and is responsible for the development of active committees in three of these states.

"After completing medical studies at Tulane University and surgical residency under Dr. Alton Ochsner at Charity Hospital in New Orleans and two years in the Navy, Dr. Field returned to his hometown of Centreville, Mississippi to carry on the work begun by his father and uncle, both Fellows of the College, who founded the Field Clinic and Centreville Memorial Community Hospital. Dr. Field continues the tradition of providing high quality medical care in a basically rural area of the country.

"A Fellow of the College since 1959, Dr. Field has perpetuated the highest standards of the College. It is an honor to present this Award to him."

Dr. Curtis P. Artz, Charleston, S. C., is national chairman of the Committee on Trauma, which carries on an active national campaign of professional and public education designed to improve all phases of care of the injured.

JOIN



TODAY

Counsel to Authors

The JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, Miss. 39216, in original and at least one duplicate copy. They must be typewritten doubled spaced on 8½ by 11-inch white bond paper with a standard typewriter.

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

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References should be limited to a maximum of 10, but when justified to the Editors, additional references will be considered for publication. Each will be critically examined, and only valid, primary references will be published. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus,* volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made after proof sheets are received by the JOURNAL.

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A thesis summary of 75 to 100 words must accompany each manuscript separately from the text.

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Index to Advertisers

American Medical Association . . . 228B
Arch Laboratories . . . 11

Beecham-Massengill Pharmaceuticals . . . 12
Burroughs Wellcome and Company . . . 8, 216A

The Dow Chemical Company . . . 208A

Eaton Laboratories . . . 4

Geigy Pharmaceuticals . . . 10A

Hill Crest Hospital . . . 10

Kay Surgical, Inc. . . . 19

Lederle Laboratories . . . 212A, 212B, 212C, 212D
Eli Lilly and Company . . . front cover, 18

Merck, Sharp and Dohme . . . 6, 7
Mississippi Medical Political Action Committee 237

Pharmaceutical Manufacturers Association 223, 224, 225
Wm. P. Poythress and Company . . . 220A, 220B

Roche Laboratories . . . second cover, 3, 16, 17, 200, 201, 218, 219, 230, 231, fourth cover

Julius Schmid, Inc. . . . 234, 235
G. D. Searle and Co. . . . 208B, 208C
Stuart Pharmaceuticals . . . 208D

The Upjohn Company . . . 14, 15, 216B, 216C, 216D

Warner-Chilcott Laboratories . . . 214, 215
Winthrop Laboratories . . . 10B, 10C, 10D, 228A
Woodward Academy . . . 19

Thomas Yates and Company . . . third cover

IN CONCLUSION

Accidents caused an estimated 114,500 deaths in 1971, slightly more than the corresponding number in 1970, according to studies publishe in the January 1972 Metropolitan Life Statistical Bulletin. Provisi mortality rate from accidents in past year was about 55.5 per 100,0 population, compared with 56.0 recorded for 1970, putting the rate 1971 at lowest level since 1964. Motor vehicle fatality rate decli to 4.7 per 100 million miles, fifth consecutive annual decline.

The Food and Drug Administration has published an order removing the exemption for paregoric, a camphorated tincture of opium and other products containing more than 100 mg of opium per 100 ml or per 100 from prescription dispensing requirements of the Federal Food, Drug and Cosmetic Act. Effective June 3, these products will be restrict to prescription sale. Agency said action was necessary because of documented abuse potential.

Health Insurance Institute reports signs of a break in the crowded hospital situation. After analyzing data from the American Hospital Association, the Institute found nearly 25 per cent of all U.S. community hospital beds are now available. Key reason for bed availability is the greater emphasis now being placed on outpatient care. Also health insurance policies are being designed to help pay for ou of hospital services, says the AHA.

Almost four million American children are in danger of losing their hearing if they don't receive medical attention, says a report of the Subcommittee for Hearing in Children of the American Academy of Cphthalmology and Otolaryngology. Data from three pilot studies involving more than 11,000 school and preschool children showed that between 15 and 16 per cent of American school children in the U.S. "can be classified as otoscopically abnormal."

No singled group or profession involved in the nursing home industry including administrators, operators, investors, M.D.s or nurses, may hold majority of seats on state boards for licensing nursing home administrators, say new regulations of HEW Social & Rehabilitation Service. Anyone with financial interest in a nursing home must be clas fied as a representative of operators, not his profession. John D. Twiname, SRS head, said states will have until July 1, 1973.

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Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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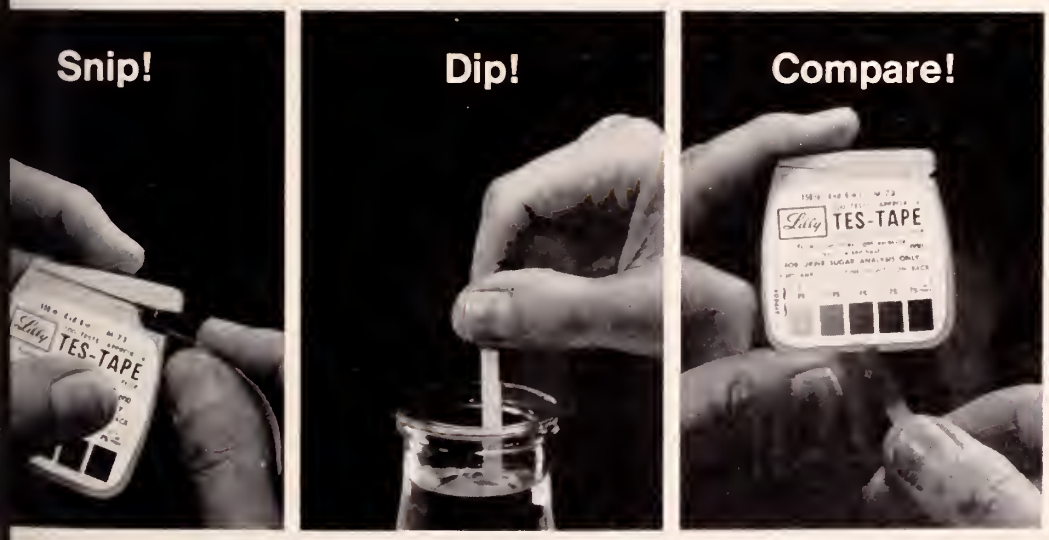
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While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

Valium®
(diazepam)

To help you manage excessive psychic tension

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A co-educational, college prep boarding school program for boys and girls, Grades 7-12.

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Allergists Plan Instructional Course

More than 200 physicians from throughout the United States are expected to gather in Seattle, Wash., in July for an intensive instructional course in current concepts in allergy and clinical immunology.

The course, sponsored by the American Association for Clinical Immunology and Allergy, is being designed to assist physicians in their preparations for the forthcoming certification examination to be given by the new Conjoint Board in Allergy, Dr. Boen Swinny, Jr., San Antonio, association president, said.

The instructional sessions will be held in conjunction with the annual meeting of the AACIA in Seattle's Washington Plaza Hotel.

Dr. Richard H. Jackson, president-elect and program chairman, said the business meeting July 16, will be followed by instructional sessions July 17, 18 and 19.

At the conclusion of the course, each participant will be provided with question forms for a self-assessment examination.

A complete course outline with a synopsis of lectures also will be given to each participating physician.

"We believe we will have an excellent faculty and an excellent course, the kind of course which will be of immense value to every allergist and clinical immunologist," Dr. Jackson said.

Dr. Sidney Friedlaender, Detroit, and Dr. Bernard A. Berman, Boston, have been in charge of organizing the course and assembling the faculty.

Additional information on the course may be obtained from the American Association for Clinical Immunology and Allergy, Post Office Box 912 DTS, Omaha, Neb. 68101.

Squibb Extends Usage of Hydrea

E. R. Squibb & Sons, Inc. announces extended usage of its anti-cancer drug, Hydrea (Hydroxyurea Capsules), for administration with irradiation in the local control of primary squamous-cell (epidermoid) carcinomas of the head and neck.

Hydrea was first introduced in 1968. It has been used effiectively for treatment of melanoma, resistant chronic myelocytic leukemia and recurrent, metastatic, or inoperable carcinoma of the ovary, say Squibb spokesmen.

Combined with irradiation, intermittent doses of Hydrea prove more effective in treatment of tumors of the oral cavity and nasal pharynx than radiotherapy alone.

The importance of Hydrea in enhancing the effects of irradiation is the compound's apparent selective inhibition of normally radioresistant cells in the DNA (deoxyribonucleic acid) synthesis stage of development. Hydrea also appears to hold other cells at the postmitotic stage where radiotherapy is most effective.

In a four-year clinical study of 60 patients with advanced primary epidermoid carcinomas of the head and neck, a combination of Hydrea and irradiation resulted in complete regression of tumor size in 80 per cent of the patients. The remaining patients had 50 per cent or greater regression in tumor size. Maximal response was evident after six to eight weeks of therapy. All patients in the study completing the combined therapy became candidates for definitive surgery.

Hydrea is administered orally and does not necessarily require that the patient be hospitalized. With proper use, and under adequate medical observation, it can be administered indefinitely to those patients who respond. Hydrea is available in capsules of 500 mg in bottles of 100.

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JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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CONTENTS

ORIGINAL PAPERS

Progress in Cancer of the Cervix in Mississippi **239** Richard C. Boronow, M.D., Jackson, Mississippi

Neurology Clinics in Outstate Mississippi **245** A. F. Haerer, M.D., and F. M. Wiygul, M.D., Jackson, Mississippi

The Blind Child **249** Roger L. Hiatt, M.D., Memphis, Tennessee

SPECIAL ARTICLE

Radiologic Seminar CXVIII: Laryngography **251** Clyde A. Ellis, M.D., Jackson, Mississippi

EDITORIALS

Aspiration of Breast Cysts **255** George H. Martin, M.D., Vicksburg, Mississippi

Who Needs the AMA? **256** Edward Siegel, M.D., New York, New York

THIS MONTH

The President Speaking **254** 'Some Goals to Strive For'

Medical Organization **265** The 104th Annual Session

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Surgeons Plan 58th Annual Congress

The world's largest meeting of surgeons, the 58th annual clinical congress of the American College of Surgeons, will be held in San Francisco, Oct. 2-6. Some 15,000 doctors and guests from throughout the world are expected to attend. Headquarters will be the Fairmont Hotel.

The program will include: 16 Postgraduate Courses (accredited by the Council on Medical Education of the American Medical Association); more than 250 research-in-progress reports, called the Forum on Fundamental Surgical Problems; some 50 panel discussions and symposia in general surgery and the surgical specialties, including more than a dozen interdisciplinary sessions; seven operative telecasts from San Francisco General Hospital; special sessions in cancer, trauma, surgical education, operating room environment, and international relations, and a "What's New in Surgery" resume.

A new Congress feature is the Correlative Clinic which is case studies showing the value of close cooperation between general surgery, the various surgical specialties and other disciplines. Some 450 scientific and industrial exhibits will also be presented.

There will be major addresses by the incoming president of the College and selected guest speakers; approximately 100 films and cine clinics including those in "spectacular" surgery; seminars for young surgeons with leading professors of surgery; and convocation ceremonies for Initiates becoming Fellows (members) of the College on Thursday evening, Oct. 5. Honorary Fellowships will also be presented on this evening.

Fellows of the College whose dues are paid to December, 1971, may register free. Non-Fellows pay $90. Doctors in the Federal Services pay $50. Initiates, members of the Candidate Group, and Surgical Residents register free. The Clinical Congress of the American College of Surgeons is open to all doctors of medicine. Everyone taking one of the 16 Postgraduate Courses must pay the fee for the Course selected.

Official forms for registration, housing and postgraduate courses will be available after June 1. Contact: S. Frank Arado, American College of Surgeons, 55 East Erie Street, Chicago, Ill. 60611. For information regarding exhibits contact Joan Memoli. Dr. Edwin W. Gerrish is in charge of all scientific programs for the College.

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis* and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully correlated with bacteriologic and clinical response. When a patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture medium.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 to 100 mg should be maximum total sulfonamide level. Toxic adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides. Infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnant at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, somnia. *Miscellaneous reactions:* Drug fever, chills, nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarity to some goitrogens, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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:ute, recurrent or chronic nonobstructed cystitis

TWO BUILT-IN BENEFITS OF GANTRISIN®

sulfisoxazole/Roche®

1.

High urinary drug levels

Gantrisin quickly reaches peak antibacterial concentrations in the urine—usually in 2 to 3 hours. With the recommended dosage regimen, Gantrisin maintains these high urinary levels throughout therapy to combat such susceptible organisms as *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

2.

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*Koch-Weser, J., *et al. Arch. Intern. Med.*, *128*:399, 1971

For nonobstructed cystitis

begin with

Gantrisin®

sulfisoxazole/Roche®



Usual adult dosage:
4 to 8 tablets *stat*
2 to 4 tablets *q.i.d.*

Prompt relief of pain is a lot of what the practice of medicine is all about... East or West.

In much of the Far East, the analgesic efficacy of Empirin® Compound with Codeine would probably be measured against acupuncture, an ancient and traditional therapeutic system.

In America, codeine sets such a high standard for oral analgesia, that it has become a criterion in terms of which other major oral analgesics are most often measured.

Synthetic and other oral analgesics may offer some of the properties of codeine, but not one can provide both its benefits and potency. And codeine provides an antitussive bonus.

Empirin Compound with Codeine is the most widely used, and probably the most pharmaceutically elegant analgesic preparation providing codeine. It's the time-tested combination for predictable pain relief . . . whether the pain is visceral or musculoskeletal; acute or chronic.



(III) **New prescription flexibility.** At your discretion, and where state law permits, a prescription for Empirin Compound with Codeine may now be refilled up to five times in six months.

Empirin Compound with Codeine No. 3 contains codeine phosphate (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½. Bottles of 100 and 1000.*



But for relief of Western pain

EMPIRIN®
COMPOUND C̄
CODEINE

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NEWSLETTER

June 1972

ar Doctor:

W's decision to require hospitals that have used Hill-Burton funds to ovide minimum charity services drew reaction from American Hospital sociation. Acting Executive Secretary Madison B. Brown said, "We e gravely concerned...To demand that hospitals exceed present charity ligations under the Hill-Burton program...is seeking to relieve a vernment responsibility by further burdening the private institutions."

AHA said that under proposed regulations, an institution would be considered in compliance if it provided uncompensated care equal to 25% of net income or 5% of operating costs, whichever was greater. Medicare and Medicaid reimbursement would be excluded from operating costs in determining base to which 5% applies.

t packaging for drugs will come into wider use as a result of new vernment regulations, according to W. G. Barker, market director for ynolds Metals Co. "Implementation of the Poison Prevention Packaging and closer control by the FDA over potency levels of drug products ould encourage drug manufacturers to utilize unit packaging," he said.

dicare officials warn that physicians who accept assignment but x-out aim form wording stating they will accept charge determination of Medi- e carrier as full charge are risking legal jeopardy. Medicare law re- res those accepting assignment to honor full charge determination le by carrier. This does not apply to those who directly bill patients.

od and Drug Commissioner Charles Edwards acknowledged that FDA's ap- oach to new drug application procedures has its deficiencies and de- s, but pointed out what agency is doing to eliminate these problems. eaking at annual PMA meeting, he called for cooperation from industry, h better quality scientific data on drugs submitted for approval.

"heroin hotline" set up by Justice Department has been kept busy far. Spokesman said average of 11 persons on hour, day and night, called hotline number. The department's Drug Abuse Law Enforcement fice said more than 7 out of 10 of the calls contained sufficiently bstantial information to warrant investigation by narcotics agents.

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor



These are Candeptin:

The highly effective candicidin for all your vaginal moniliasis patients.

First came CANDEPTIN (candicidin) Tablets for intravaginal use. Then CANDEPTIN Ointment to treat labial involvement and for intravaginal use. Now unique **CANDEPTIN VAGELETTES**—candicidin ointment in soft gelatin capsules—extend the range of CANDEPTIN therapy to even your pregnant and virginal patients (you merely cut off the narrow tip and extrude the contents through the intact hymen).

Clinical proof of potency

CANDEPTIN brings your patients prompt relief of itching, burning and discharge—usually within 72 hours.[1] A single, 14-day course of treatment is usually all that's needed for a complete cure.[2,3,4]

Significantly more potent *in vitro* than nystatin.[5] CANDEPTIN Tablets and Ointment have shown clinical cure rates of 90% and higher in both pregnant and non-pregnant patients.[1,4,6] And in recent studies of **CANDEPTIN VAGELETTES** Vaginal Capsules involving both pregnant and non-pregnant patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Only CANDEPTIN gives you a dosage form for every therapeutic need, plus *eight years' clinical proof* of potency. Consider CANDEPTIN for your next vaginal moniliasis patient.

CANDEPTIN®
(candicidin)

Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: 1. Olsen, J.R.: Journal-Lancet *85* 287 (July) 1965. 2. Giorlando, S.W.: Ob/Gyn Dig. *13*:32 (Sept.) 1971. 3. Decker, A.: Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. 5. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H.J.: Maryland M.J., *15*:36 (Feb.) 1966.

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CANDEPTIN®
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Vaginal Tablets
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and VAGELETTES™
Vaginal Capsules

Military Surgeons Hold 79th Annual Meeting

Emphasizing the theme, "Federal Medicine: A National Resource," medical departmental officers and civilians of the Armed Forces, Veterans Administration, and Public Health Service will convene for the 79th annual meeting of the Association of Military Surgeons of the United States, to be held at the Convention Center, San Antonio, Tex., on Dec. 10-13, 1972, Lieutenant General Alonzo A. Towner, the Surgeon General of the United States Air Force and president, Association of Military Surgeons, has announced.

Brigadier General George E. Schafer, commander, Aerospace Medical Division (AFSC), Brooks Air Force Base, Tex., has been appointed general chairman for the meeting, and co-chairman is Brigadier General Gerrit L. Hekhuis, Director of Professional Services of the Office of the Surgeon General, Headquarters, United States Air Force. "This will be the first time since 1949 that the association has held its annual meeting outside Washington, D. C., and we are enthusiastic about the new adventure. We hope to make it the best meeting yet," according to Gen. Schafer.

Chairman of the Scientific Program Committee is Brigadier General John H. Wilkins, director of Plans and Hospitalizations, Headquarters, USAF, and his co-chairman is Brigadier General Paul H. Myers, Commander, Wilford Hall USAF Medical Center, San Antonio.

The conference will highlight the contributions of federal medical programs to national health delivery. It will also include an exhibit program and a film program as well as scientific meetings. On Dec. 11, the scientific program will include presentations on "New Generation of Hospitals" and "The National Library of Medicine" together with a panel discussion on the contributions of federal medical programs to national health delivery. This panel will cover such aspects as family practice, MAST, emergency medical care, paramedical training and utilization, alcohol rehabilitation, frozen blood, VA-University teaching affiliation, health maintenance organization concept, and dental care. On Tuesday, the program will include "Automation in Health Care Delivery" and on Wednesday, a discussion of "What's New in Transplantation."

Membership is open to all officers and civilians (GS-9 and above) of the five federal medical services, including physicians, dentists, nurses, medical administrators, pharmacists, veterinarians, and medical specialists.

In Swimmer's Ear



"Certain of the species are apt to encounter aural difficulties after engaging in various natatory pursuits."

Furacin® Otic

(nitrofurazone) antibacterial/anesthetic/antifungal

Formula: Contains (w/w) 0.2% FURACIN, brand of nitrofurazone, 0.375% Micafur®, brand of nifuroxime, and 2% diperadon hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.

Indications: For treatment of bacterial otitis externa, bacterial otitis media and otomycosis. In otitis media, this preparation is not effective if the tympanic membrane is intact.

FURACIN (nitrofurazone) and Micafur (nifuroxime) are active against a variety of gram-positive and gram-negative organisms. Activity versus Pseudomonas sp. is limited to certain strains. Micafur (nifuroxime) is active against Candida (Monilia) albicans.

Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary.

Supplied: Bottle of 15 cc. with dropper.

® Originators and Developers of The Nitrofurans

EATON LABORATORIES
Division of The Norwich Pharmacal Company
NORWICH, NEW YORK 13815

DATELINE

urgeons Report n Malpractice

Chicago, Ill. - Two out of five of 15,000-plus surgeons responding to American College of Surgeons survey have had a malpractice claim within past 12 years. claim is considered as any indication from a patient to the physician hat legal action is being planned or started. Ninety per cent of set- lements reported were under $100,000 and 68 per cent were less than 10,000. Over half felt their area has a professional liability problem.

lome Health Care Needs Improving

Washington, D.C. - Removal of Medicare "barriers" to home health care is urged in Senate Committee on Aging report. Study cited regulation requiring that atient be hospitalized for at least three days before Medicare pays ome health care costs and noted that Medicare requires patient to pay art of physician's fee if treated at home. It said the changes would ut costs and many patients would be better off if cared for at home.

ncentives For hysicians Sought

New York, N.Y. - Discovery of incentives to secure the cooperation and support of interested and well-qualified physicians has been termed a prerequisite or success of the new health care delivery methods now being proposed or U.S., according to Dr. George M. Wheatley, vice president of Metro- olitan Life Insurance Company in a talk before the Committee on Medi- ine in Society at the New York Academy of Medicine.

aywalking Could e Safer?

San Diego, Cal. - California study over five years at 400 intersections reports that 177 pedestrians were struck in crosswalks by vehicles while only 31 were truck jaywalking. Of these accidents, 18 were fatal in "safe" marked rossing and three fatalities resulted from jaywalking. Nearly six times s many accidents occurred in marked crosswalks. Report said, "marked rosswalks may cause pedestrians to have a false sense of security."

ew Pain tudies Reported

Stanford, Cal. - The young can stand pain better than elderly, reported Dr. K. W. Woodrow, Stanford Psychiatry Dept., to American Psychiatric Assn. It's easier o hurt a woman than a man and whites have higher pain threshold than lacks or orientals showed study of 41,119 Kaiser-Permanente patients. ressure on achilles tendon produced deep pain, and results implied clear ifferences in pain tolerance according to age, sex and race.

When you prescribed Orinase®

(tolbutamide, Upjohn)

14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures nec
for optimal control with insulin are also necessary with O
The patient on Orinase must be fully instructed: abo
nature of his disease; how to prevent and detect complic
how to control his condition; not to neglect dietary restri
develop a careless attitude or disregard instructions rela
body weight, exercise, personal hygiene, and avoidance
fection; how to recognize and counteract impending hy
cemia; how and when to test for glycosuria and ketonuri
to use insulin; and to report to the physician immediatel
does not feel as well as usual.

Caution, very close observation, and careful adjustm
dose are necessary when: insulin is withdrawn during t
period in order to avoid ketosis, acidosis, and coma; t
diuretics are administered which may result in aggrava
diabetic state and increased tolbutamide requirement,
rary loss of control, or even secondary failure; treating p
with impaired hepatic and/or renal function and debilitate
nourished, or semistarved patients in order to avoid severe
glycemia which may require corrective therapy over
days; and treating patients with severe trauma, infection,
gical procedures where temporary return to insulin or a
of insulin may be necessary. Response to tolbutamide is
ished in patients receiving therapy with beta blocking

As some diabetics are not suitable candidates, it is es
that the physician familiarize himself with the indications
of application, and selection of patients for therapy.

Patients must be under continuous medical supervisio
during the initial test period should communicate with the

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daily, and during the first month report at least once weekly hysical examination and definitive evaluation. After a month, inations are recommended monthly or as indicated. Ap- nce of ketonuria, increase in glycosuria, unsatisfactory ring or persistent elevation of blood sugar, or failure to n and hold clinical improvement indicate nonresponsive- to Orinase (tolbutamide). Orinase does not obviate need for taining standard diet regulation. Uncooperative patients d be considered unsuitable for therapy. Prescriptions should filled only on specific instruction of physician. In treating asymptomatic diabetic patients with abnormal glucose nce, glucose tolerance tests should be obtained at three- -month intervals. Orinase is not an oral insulin or a substi- or insulin and must not be used as sole therapy in juvenile tes or in diabetes complicated by acidosis or coma where n is indispensable.

henformin is prescribed in combination with Orinase, ap- iate package literature should be consulted.

verse Reactions: Severe hypoglycemia, though uncommon, occur and may mimic acute neurologic disorders such as ral thrombosis. Certain factors such as hepatic and renal se, malnutrition, advanced age, alcohol ingestion, and al and pituitary insufficiency may predispose to hypogly- a and certain drugs such as insulin, phenformin, sulfona- s, oxyphenbutazone, salicylates, probenecid, monamine se inhibitors, phenylbutazone, bishydroxycoumarin, and yramidol may prolong or enhance the action of Orinase and ase risk of hypoglycemia. Orinase long-term therapy has reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

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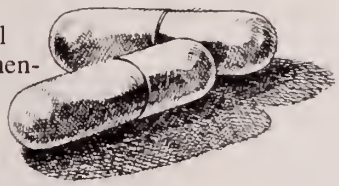
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Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians

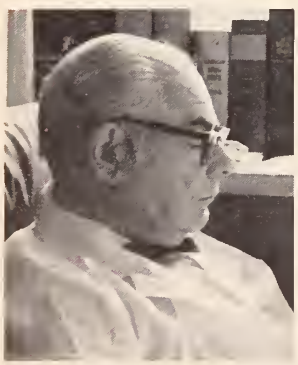
13.3%
Yes, it would be useful

86.7%
No, it would not be useful

Would it be useful in clinical practic to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really determined.

The Bureau of Drugs suggested the package sert as a possible mean communicating informa on relative efficacy of d to the physician. I find objectionable, since I not believe the physi should have to rely on source for final scien truth. There is also a p tical objection: Since physicians actually pense drugs, they sel see the package insert any event, I would m tain that the physic should know what drug wants and why without pending on the governm or the manufacturer to him.

Undoubtedly, physici are swamped by exces numbers of drugs in s therapeutic categories. I am well aware that m drugs within such ca gories could be elimina without any loss, or haps even some profit the practice of medic But, in my opinion, neit the FDA nor any ot single group has the exp tise and the wisdom ne sary to determine the "drug of choice" in areas of medical practic

Maker of Medicine

nneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



n my opinion, it is not function of any governnt or private regulatory ncy to designate a "drug hoice." This determinan should be made by the sician after he has red full information on properties of a drug, then it will be based on experience with this g and his knowledge of individual patient who eeking treatment.

f an evaluation of comative efficacy were to be le, particularly by govment, at the time a new g is being approved for rketing, it would be a at disservice to medie and thus to the patient e consumer. For exam- when a new therapeuagent is introduced, on basis of limited knowle, it may be considered be more potent, more ective, or safer than ducts already on the rket. Conceivably, at s time the new drug ld be labeled "the drug choice." But as addial clinical experience is mulated, new evidence y become available. er, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
June 1972, Vol. XIII, No. 6

ORIGINAL PAPERS

Progress in Cancer of the Cervix in Mississippi

RICHARD C. BORONOW, M.D.
Jackson, Mississippi

CANCER OF THE CERVIX has, within the past half-century, decreased from the number one cancer killer among the American female population to number four. Breast cancer is the leader, followed by colon and rectal cancer and, according to American Cancer Society projections for 1971, ovarian carcinoma will edge slightly ahead of cervix for the third rank. With the increasing utilization of cytological screening, and the evolution of better therapeutic modalities, there has been a gratifying decrease in deaths. With appreciation of the role of cytology, it has become apparent that death from cancer of the cervix is virtually preventable; it can be detected and cured in its preclinical and preinvasive phases. However, while we recognize progress, this dread disease remains a very real killer in our midst as evidenced by the American Cancer Society projections for Mississippi.[1] (See Table 1.)

There are three significant areas of progress responsible for the improved cervix cancer picture in Mississippi. These include: (1) increased utilization of the Pap smear, (2) better definition of the appropriate workup of the patient with an abnormal Pap smear, (3) better primary treatment of invasive cervix cancer.

Within the past half-century, cancer of the cervix has decreased from the number one cancer killer among American women to number four. The author points out that increasing utilization of cytological screening and the evolution of better therapeutic modalities have resulted in a gratifying decrease in deaths. He gives the areas of progress responsible for the improved cervix cancer picture in Mississippi and discusses cases treated at UMC from 1955 to 1965.

Figure 1 demonstrates the increased utilization of cervical cytology among the female population in Mississippi.[2] The last national survey was conducted in 1968 and these data have not yet been released. In 1966 Mississippi was in the lowest quartile nationally; the per cent screened in the latest survey (1968) will probably be significantly greater. This belief is based partly on the growing public expression (see Figure 2) of concern by Mississippi physicians and partly on the observation that the rate of increase in Mississippi in 1966 was exceeded by only 13 other states. Private practice patients in our office more and more

Presented before the Section on Obstetrics and Gynecology, Mississippi State Medical Association, Biloxi, May 4, 1971.
From the Gynecologic Tumor Service, Department of Obstetrics and Gynecology, University of Mississippi Medical Center, Jackson.

have come *to expect rather than just accept a Pap smear.* Indigent patients are afforded the opportunity of cervical cytology through various prenatal clinics, family planning clinics and others. All of this effort will reduce the death rate, spare the morbidity and save many children from being left motherless. While certain high risk populations have been identified for cervix cancer in multiple epidemiologic studies, it is generally recommended that all female patients 20 years or over have annual cervical cytology. This age is lowered if the patient is married or has ever been married; or is pregnant or has ever been pregnant.

APPROPRIATE EVALUATION

When a Pap smear report is returned as "atypical" or a Papanicolaou classification grading of 3, 4 or 5 is given, or if a cytologic diagnosis of "dysplasia," "carcinoma in-situ" or "invasive cancer," is made, *the physician, nevertheless, is responsible for establishing a precise diagnosis before instituting any form of treatment.* This obviously implies adequate histologic sampling involving some form of biopsy technique.

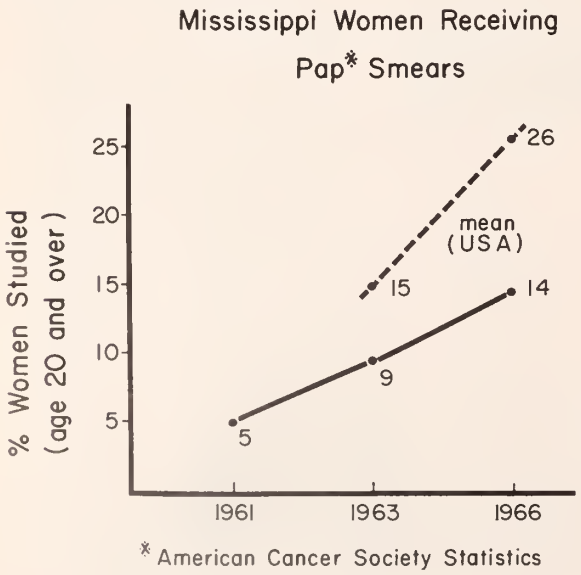


Figure 1

Figure 3 indicates what is generally accepted as a national standard by most for the assessment of the abnormal smear. Upon receipt of the initial report one generally repeats the smear and takes cervical biopsies. If there is a gross lesion one biopsies it. If there is no gross lesion, an iodine stain (Schiller's solution, Lugol's solution) may be useful in identifying areas to biopsy. Various degrees of cervical intraepithelial neoplasia will stain poorly or not at all. One should remember that normal endocervical epithelium does not take the stain either. This technique helps to assure that multiple biopsies include the areas most likely to harbor the atypia. Also performed in conjunction with this step is a thorough endocervical curettage, which we consider to be an essential part of the outpatient workup. It is to be emphasized that these procedures can be done as an outpatient, in the office or clinic, and save the expense, inconvenience, risk, morbidity, and other factors associated with hospitalization, anesthetic, and time away from family. If invasive cancer is found on these biopsies, the diagnosis is established and treatment can be instituted. We feel biopsies are an important intermediate step and one *should not* proceed directly from the atypical smear to a cone, because it will not be necessary in all instances. One other precautionary note is the avoidance of doing a cone biopsy through a gross lesion. This introduces theoretical factors of

Resolution No. 8

. . . "Resolved, that the Mississippi State Medical Association does endorse and encourage annual cervical cytology in adult Mississippi women and does call upon every Mississippi physician and all concerned professional and allied professional organizations to participate actively in this effort with the goal of reduction, even irradication of cervical cancer, a potentially preventable disease."

HOUSE OF DELEGATES
Mississippi State Medical Association
May 12, 1969

Figure 2

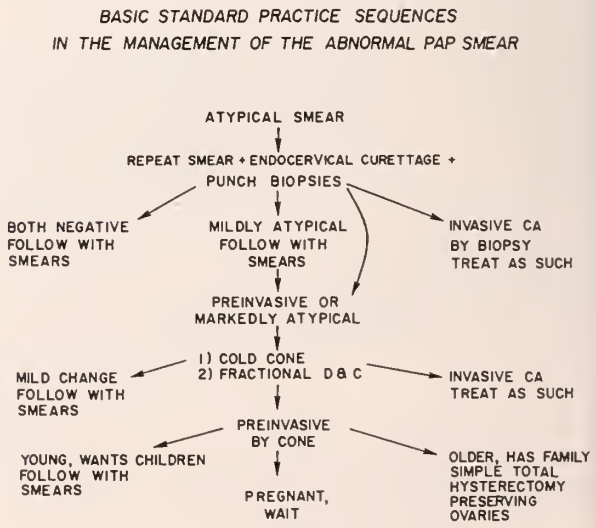


Figure 3

dissemination plus the increase in bleeding, secondary infection, and other potential complications.

The important purpose of the cone as the ultimate diagnostic procedure is to exclude the presence of invasive squamous cell carcinoma of the cervix. This is essential because with its paracervical and pelvic lymphatic spread pattern, a *conservative hysterectomy very seriously compromises the chance for cure by cutting through gross or microscopic cancer.* Local pelvic recurrence is the rule, and often the peritoneal surfaces are involved and therefore the cure rate drops, even in the presence of immediate postoperative irradiation. This type of local resection, often called the "cut-through" hysterectomy, is analogous to the dismal local failure that would be associated with a segmental resection as the definitive treatment of colon cancer, or excision of the breast lump only, for breast carcinoma.

TABLE 1

ACS PROJECTIONS FOR MISSISSIPPI 1971*

	New Cases	*Deaths*
Breast	700	275
Colon-Rectum	600	375
Lung	700	650
Oral	100	50
Skin	1,500	70
Uterus	650	200
Prostate	500	250
Stomach	200	175
Leukemia	250	200
All sites	6,500	3,400
		(140/100,000)

* American Cancer Society, 1971.

In past years, physicians and surgeons unfamiliar with the natural history and spread pattern of squamous cell carcinoma of the cervix, all too often went ahead with a simple conservative hysterectomy when faced with this lesion. With increasing understanding of this disease, the "cut-through" hysterectomy for incompletely diagnosed abnormal uterine bleeding, with its grave implications for the unfortunate patient, is totally unacceptable in 1970 medicine. Fortunately it is being seen less and less.

TABLE 2

CERVIX CANCER CASES 1955-1965
University of Mississippi Medical Center

Fresh cases treated		798
Fresh cases not treated		104
Refused treatment	32	
Too advanced	52	
Followup only	20	
Recurrent cases		200
Total		1,102

PRIMARY THERAPY IMPROVEMENTS

The first step in any improvement program is self-evaluation. There are many different treatment plans for cancer of the cervix that are employed in institutions around the world; similarly there is a wide variation in reported salvage rates for various clinical stages (see below). We recently reviewed the cases treated at the University of Mississippi Medical Center from 1955 to 1965, assuring a five-year followup. The distribution of the 1,102 cases is recorded in Table 2. Of the 798 fresh treated cases, we excluded the 228 cases of carcinoma in-situ and evaluated only the cases of confirmed invasive cancer of the cervix. The distribution of these 570 cases and the salvage is recorded in Table 3. It is necessary to consider those lost to follow-up as being dead of cancer in accordance with standard statistical reporting. This provided the uncorrected five year salvage. When excluding those cases known to have died of other causes, we arrived at the corrected five-year salvage rate.

TABLE 3

CERVIX CANCER SURVIVAL (UMC 1955-1966)

	No. Cases Treated	*No. Living Cancer-Free 5-Years*	*No. Dead of Cancer/ Lost to Followup*	*No. Dead of Other Cause*	*Per Cent 5-Year Cure* UNCORRECTED	CORRECTED
Stage I	190	128	20/28	14	68	72
Stage II	217	93	68/48	8	43	45
Stage III	115	24	66/21	4	21	22
Stage IV	48	2	37/7	1	0.4	0.4
	570	247	192/104	27	43	45

The next step was to compare our survival figures with those in volume 14 of the Annual Report (1966) which represents data collected from 125 centers world over by the International Federation of Gynecology and Obstetrics under the editorship of Dr. H. L. Kottmeier, Stockholm, Sweden.[3] (See Table 4.)

The first column indicates the high and low and the mean salvage reported from the various institutions by clinical stage. Our results reflect the international mean quite consistently. Critical evaluation also includes comparison of our results and treatment plan with the results of the treatment plan from an institution with survival figures among the best reported, such as the M. D. Anderson Hospital and Tumor Institute.

TABLE 4

CERVIX CANCER SALVAGE DATA

	(Per Cent 5-Year Cure) *Annual Report Vol. 14 (1966)*	*UMC (1955-65)*	*MDAH (1968)*
Stage I	52-91(71)	72	91
Stage II	31-71(51)	45	70
Stage III	10-52(28)	22	42
Stage IV	0-12(10)	0.4	14

In cooperation with our Division of Radiotherapy under the direction of Dr. B. T. Hickman, a prospective radiation therapy study was designed (see Table 5) which compares two different radiation therapy methods: Group A, the system in use at the University of Mississippi Medical Center; Group B, the treatment plan employed at the University of Texas M. D. Anderson Hospital and Tumor Institute. This study allows us to compare survival, complications and personnel radiation exposure.

One important difference is that the traditional treatment at our institution utilizes a loaded radium applicator (Ernst) whereas the Anderson Hospital method utilizes the Fletcher-Suit after-loading applicator (whereby the radium carriers are packed in place in the operating room but are not loaded until the positional films have been checked for accuracy of placement and the patient has returned to her room).

External beam therapy for the Group A patients consists of parametrial anterior and posterior 6 · 15 cm. portals, a 3 cm. midline separation, and a calculated depth dose of 4000 rads. External beam therapy in the Group B patients utilizes parametrial and/or whole pelvis portals; the portals selected and the depth dose delivered varies according to the clinical stage of disease as recorded in the plan outlined by Fletcher.[4] The discrepancy in physician radiation exposure when

TABLE 5

U.M.C. RADIATION THERAPY STUDY

Group A UMC Plan
Loaded system (Ernst)
Group B MDAH Plan
After-loaded system (Fletcher-Suit)
Parameters:
1. Survival
2. Complications
3. Radiation Exposure

a loaded radium system is used compared to one utilizing the after-loading prineiple was quantitated by means of film badges (Landauer Co.) worn at the neck and waist of the operator and assistant for each radium insertion, whether loaded in the operating room (the Ernst applicator in the Group A patients) or in the patient's room (the after-loading applicator in the Group B patients). These data have been recently analyzed and reported.[5] Table 6 records the total number of insertions, the total milligrams of radium used and the average milligrams for each loading. Table 7 records the millirem exposure for each loading in the two groups. There is nearly an identical exposure for the assistant and the operator when using the loaded system. The exposure to the

TABLE 6

RADIUM LOADING IN EACH GROUP

	Total Loadings	*Total Milligrams*	*Average Milligrams Per Loading*
Group A (Loaded system)	25	1905	76
Group B (After-loading system)	42	2800	67

From Boronow, Richard C., and Hickman, Bernard T.: A Comparison of Two Radiation Therapy-Treatment Plans for Carcinoma of the Cervix. I. Personnel Radiation Exposure. Amer. J. Obstet. Gynec. 110:693-695. 1971.

physicians managing the after-loading system, however, is dramatically different. Table 8 defines the differences recorded in Table 7 by recording the millirem exposure per milligram radium for these personnel. The difference in the two series for operator exposure at the neck is nine-fold and the assistant 35-fold; for the operator at the waist

TABLE 7

PHYSICIAN RADIATION EXPOSURE (MILLIREMS) PER APPLICATION

	Operator				*Assistant*			
	NECK BADGE		WAIST BADGE		NECK BADGE		WAIST BADGE	
	Total	Average	Total	Average	Total	Average	Total	Average
Group A (Loaded system)	490	19.6	500	20	450	18	520	20.8
Group B (After-loading system)	80	1.9	20	0.47	20	0.47	10	0.24

From Boronow, Richard C., and Hickman, Bernard T.: A Comparison of Two Radiation Therapy-Treatment Plans for Carcinoma of the Cervix. II. Personnel Radiation Exposure. Amer. J. Obstet. Gynec. 110:693-695, 1971.

TABLE 8

PHYSICIAN RADIATION EXPOSURE (MILLIREMS) PER MILLIGRAM OF RADIUM USED

	Operator		*Assistant*	
	NECK	WAIST	NECK	WAIST
Group A (Loaded system)	0.26	0.26	0.24	0.27
Group B (After-loading system)	0.28	0.007	0.007	0.0036

From Boronow, Richard C., and Hickman, Bernard T.: A Comparison of Two Radiation Therapy-Treatment Plans for Carcinoma of the Cervix. III. Personnel Radiation Exposure. Amer. J. Obstet. Gynec. 110:693-695, 1971.

TABLE 9

COMPARATIVE TREATMENT RESULTS—CERVIX CANCER STUDY

	*Group A (Ernst Plan)**			*Group B (MDAH Plan)**		
	ENTERED	DEAD OF CANCER	RADIATION FISTULA	ENTERED	DEAD OF CANCER	RADIATION FISTULA
I	12	1	0	11	0	0
II	30	7	2	26	1	0
III	2	2	0	8	3	0
Totals	44	10	2	45	4	0

* See text for description.

37-fold and the assistant 75-fold. These data reinforce the observations made by Suit and associates[6] regarding the significant reduction in personnel radiation exposure when after-loading is utilized. In addition to sparing the physician, other personnel are also spared this exposure (operating room and recovery room personnel). Further, by being able to leisurely pack a radium system in place without fear of excess exposure it would seem inevitable that the packing will be done more accurately, and that a more therapeutically effective result will be obtained with a concomitant reduction in complications. *Our institution has now discontinued the use of the loaded applicator in favor of routine use of the after-loading system.*

It is too early to accurately assess the other aspects of this project. All patients entered in the series have been followed carefully to determine cause of death and to note major or minor treatment complications. Only tentative impressions may be drawn from the preliminary results recorded in Table 9. The 99 patients were fairly evenly divided in the two groups and the stage for stage distribution is also quite similar. In this relatively short interval there have been ten deaths from cancer in Group A and only four in Group B. Also of interest is the fact that there have been two radiation induced fistulas in Group A and none in Group B. Clearly, additional time is necessary to evaluate these comparative results and the impact of our shift in radiation therapy planning on the overall survival of patients treated. The results are encouraging, however.

SUMMARY

This review identifies three aspects of the cervix cancer problem that can all help reduce the death rate of this disease:

(1) Increased utilization of the Pap smear

literally prevents deaths from invasive cervix cancer.

(2) Careful and methodical evaluation of the abnormal Pap smear avoids incorrect treatment.

(3) The University of Mississippi has revised its radiotherapeutic approach to cervix cancer. All are encouraged to re-evaluate their own experience in light of this report. We are anxious to work with others toward similar revision. Cooperative arrangements might be worked out that will emulate treatment plans that have produced exceptionally favorable results. ★★★

2500 North State Street (39216)

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ALWAYS PREPARED?

Two Boy Scouts were on a hike. One said to the other: "Speaking for myself, I'm trustworthy, loyal, courteous, kind, obedient, cheerful, thrifty, brave, clean—and lost!"

Neurology Clinics in Outstate Mississippi

The First Two Years of Operation of the Comprehensive Neurology Project as Supported by the Mississippi Regional Medical Program

A. F. HAERER, M.D. and F. M. WIYGUL, M.D.
Jackson, Mississippi

This paper is a report on the neurology clinic program for Mississippi which is administered by the University Medical Center Division of Neurology and the Mississippi State Board of Health. Funding was obtained from the USPHS through the Mississippi Regional Medical Program. The authors discuss clinic locations, local participation, types of illnesses seen and staff support.

AT THE TIME of this writing, all actively practicing neurologists in Mississippi are located in the capital, Jackson, and at Keesler Air Force Base in Biloxi. There are several neurosurgeons practicing in Jackson and three or four in the other large cities of the state. Access of the state's population to neurological evaluation and care has of necessity been limited to those who could afford travel to Jackson or to larger cities outside the state boundaries. Thus, neurological consultation in Mississippi outside Jackson was not available until the inception of a project sponsored by the State Board of Health and the University Medical Center Division of Neurology, funded by the USPHS Neurological and Sensory Disease Program, for the evaluation and care of epileptic children and adults which began in January, 1964. This project was well received and when it closed in 1968 the directors felt that a similar but more comprehensive project of general neurological evaluation and care should be formulated for the state of Mississippi.

Funds were requested from the Mississippi Regional Medical Program to organize clinics under the joint auspices of the State Board of Health and the University Medical Center Division of Neurology. Clinics were established for all neurological diseases, initially with emphasis on strokes. These clinics take place in several cities throughout the state in local health departments or hospitals with the cooperation of local physicians and health department personnel.

The plan was to provide neurological consultations and diagnostic services in out-state Mississippi thereby improving the overall neurological care in the state. Laboratory procedures for neurologic disorders which were not otherwise routinely available in the areas involved were to be set up. Referral resources for physicians in practice were to be developed and an increased community awareness of neurological disorders and the special services available for these created. Provision of neurological consultation services to other health related programs such as the Department of Education, Mental Retardation, and Mental Health Regional Programs was also hoped for, as was the establishment of an avenue of continuing education for physicians, nurses and other paramedical personnel in out-state Mississippi in the areas of cerebrovascular disease and neurology in general.

The project was funded in October, 1969, and the first clinic under this project was held on October 20, 1969.

Initially, clinics were held once a month in one or two of four or five locations. Since then the number and locations of the clinics have

From the Division of Neurology, University Medical Center, and the State Board of Health, Jackson.

steadily grown to encompass most of the state, and at the present time an average of three clinics per month are being held.

Referrals of patients to these clinics are made by physicians contacting the local or state health department or by health department personnel directly.

The clinics are attended by a senior staff member of the neurology division of the University Medical Center, a pediatrician who is also a member of the State Board of Health senior staff, one or two neurology residents, occasionally other physicians and medical students, a social worker and frequently a public health nurse from the State Board of Health. In addition, health nurses and supportive personnel from the local health department attend. In several locations, physicians in the local area will also attend some or all of these clinics to consult freely with the visiting staff.

An EEG technician follows the primary team on separate dates to conduct electroencephalographic studies which are then interpreted by a staff member from the University Medical Center. Required laboratory and x-ray diagnostic services are obtained through the State Board of Health with cooperation of local facilities or through the Neurology Laboratory at the Medical Center in Jackson. Special laboratory tests not generally available are made free of charge under this project for those who require it. These tests include the performance of anticonvulsant levels (Dilantin, Phenobarbital), measurement of serum creatine phosphokinase and aldolase to aid in the diagnosis of muscle diseases, and cerebrospinal fluid immunoglobulin G determinations to aid in the detection of demyelinating disorders.

INITIAL SCREENING

Patients are initially screened in these clinics. They are then either returned to the care of their primary physician, discharged, or instructed to return to subsequent clinics to check on their therapeutic progress. In selected instances, where special in-patient neurologic workup is required, these patients are admitted to the neurology service at the University Medical Center or, if they have funds, they are referred to various private physicians in the neurosurgical or neurological specialties in Mississippi and adjacent states.

Referrals from these neurology clinics are made to a number of other health resources, such as the Welfare Department, Crippled Children's Service, Vocational Rehabilitation, Mental Health Services, Special Education Classes, Speech and Hearing Services, etc. The social worker screens every patient at the time of the initial visit and is able, with her current knowledge of the referral sources available, to accomplish this necessary function in addition to giving helpful advice about many other factors affecting the patient's general welfare.

In conjunction with each clinic, educational activities are available for physicians, nurses and paramedical personnel of the area in which the clinic is located. This educational service includes comments on the diagnosis and care of patients with neurological disorders. In some instances informal discussions are held with medical and paramedical persons, at other times planned staff conferences are held and are attended by the doctors holding the clinic, the project social worker, and by the nurses in the county where the clinic is held. Nurses and welfare workers from the adjacent areas as well as local doctors may attend these conferences.

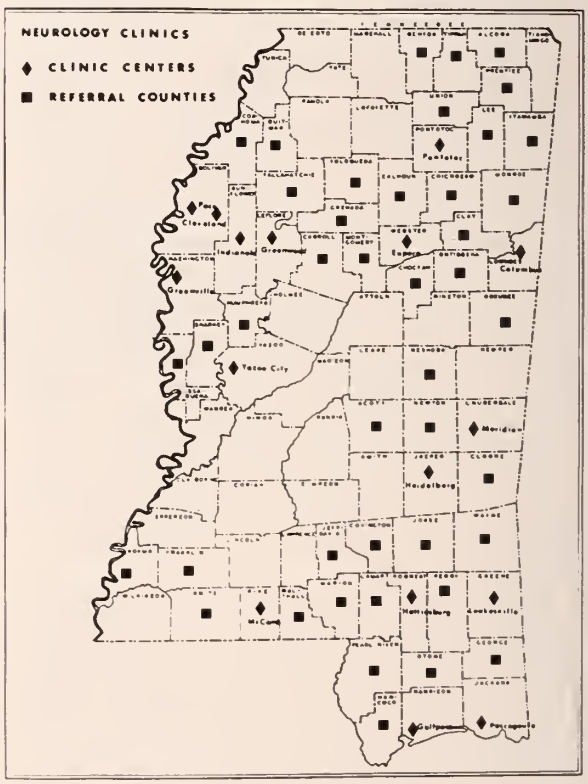


Figure 1

The project has increased the interest of many nurses for in-service training in the neurologic area. In-patient hospital rounds with local physicians have been conducted at several hospitals in connection with these clinics. Nursing homes have been visited on several occasions when a physician invited the clinic staff to do so.



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oxyphenbutazone NF tablets of 100 mg.

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Do not adm[illegible]ter [illegible]y. Carefully evaluate patient
Before starting treatment and keep them under close
supervision. Obtain [illegible] history and complete
physical and laboratory examination. Complete
hemogram urinalysis etc. before prescribing and at
frequent intervals thereafter. Careful observation of patient
avoiding those responsive to fluid retention necessitates care
fully titrated patients or those who cannot be observed
frequently. Warn patients not to exceed recommended
dosage. Short term relief of severe symptoms with
the smallest possible dosage is the goal of therapy.
Dosage should be taken with meals or after glass of
milk. Patients should discontinue the drug and report
immediately any signs of ulcer or gastrointestinal
lesions, symptoms of blood dyscrasia, epigastric pain, symptoms of edema, black or tarry
stools or other evidence of gastrointestinal
hemorrhage. [illegible] Avoid [illegible]
edema. Acre[illegible] Discontinue
inue in the absence of a favorable response. Re-
treatment per[illegible] [illegible]
ndications: Adult [illegible] rheumatoid arthritis
rheumatoid spondylitis.
Contraindications: Children 14 years of age; gastric
patient history of [illegible] gastrointestinal
ulcerative [illegible]
dyspepsia, history of [illegible]
dyscrasias, renal [illegible]
hypertension, [illegible]
[illegible]oma; [illegible]
drug polymyalgia, temporal arteritis,
patients receiving [illegible]
agents for long-term [illegible]
Warnings: Age, [illegible]
existence of [illegible]
potent chemical [illegible]
ions. Carefully control [illegible]
patient, especially the aging (forty years and over)
who have increased susceptibility to the toxicity of the
drug. Use lowest effective dosage. Weigh [illegible]
unpredictable blood [illegible] potential risk of severe
even fatal reactions. The disease condition [illegible]

[illegible] drug [illegible]
[illegible]
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While the clinics were mainly intended for indigent persons who were unable to travel to a neurological center, occasional private patient referrals are also seen in these clinics for screening purposes.

In the first two full years of operation of this project, 96 clinics were held. These clinics were held at 16 different centers throughout the state. Referrals were seen from 58 counties in the state of Mississippi. The appended map (see Figure 1) shows the clinic centers and referral counties. Counties within easy driving distance of Jackson were not included because of the availability of various neurologic facilities in Jackson.

Nine hundred and sixty-nine new patients were seen in the first two years of operation of this clinic project. The total number of patient visits was 1,677.

Four hundred and thirty-eight electroencephalograms were done on patients during this time period. Several hundred anticonvulsant and enzyme level analyses and several cerebrospinal fluid studies were also performed.

Of the new patients, 69 per cent were 21 years of age or older, the remainder were under 21 years of age. Forty-four per cent of the patients were black; 56 per cent were white. Fifty-four per cent were male and 46 per cent were female. Emphasizing the scope of developmental disability in the state of Mississippi, however, is the fact that almost two-thirds of the total patient visits in these clinics were for individuals below 18 years of age.

Approximately 90 per cent of the patients seen in these clinics were considered medically indigent or nearly so.

Fifteen per cent of the patients came from physician referrals, whereas 85 per cent came through referrals from public health nurses, the health and welfare departments and other facilities in the counties involved.

Thirty-one per cent of the patients have been discharged from these clinics. Five per cent of the patients were discharged back into the care of their regular family physician, and many others will be discharged as their diagnostic evaluation finishes. Another five per cent of the patients were admitted to the hospital for specialized diagnostic studies and treatment. Sixty per cent of the patients are still being followed in the clinics periodically.

The types of diagnoses made in these clinics are outlined in the accompanying table. The vast majority of patients had various types of seizure disorders. Seventy per cent of the epileptics in this population were below 21 years of age, implying that most of them acquired their disease at or before puberty. Next in frequency are patients with mental retardation, learning or behavioral problems who did not have seizures, patients with no demonstrable organic disease who were screened for neurologic disorders, miscellaneous neurological disorders, and patients with headaches, cerebrovascular disorders, back problems and miscellaneous other organic disorders followed.

TABLE 1

DIAGNOSES OF PATIENTS IN MISSISSIPPI NEUROLOGY CLINICS

	Per Cent
Convulsive disorders	46
Mental retardation, learning or behavior problems (without seizures)	15
Headache problems	4
Cerebrovascular disorders	4
Back problems, discs	3
Muscle disease	1
Other neurologic disorders	13
No organic or no neurologic disease	14

The steady growth of the number of clinics and the number of patients seen in these clinics serves as an indicator of the value of this project in the authors' opinion. One problem at the present time is that the State Board of Health and the University Medical Center have been unable to mobilize sufficient staff to meet the volume of referrals. There is a backlog of over 100 patients at any given time waiting to be seen in the next several clinics.

PROJECT POTENTIAL

The staff believes that this project has great potential, part of which has already been realized, in developing the awareness of the devastating effects of neurological diseases on a large segment of the population of the state of Mississippi. This applies especially in regard to epilepsy, cerebrovascular disorders and various types of mental retardation. This project has provided diagnostic and supportive services to help those with neurological disease to function in their community. Attention has been focused upon the need for prevention of disability and rehabilitation from strokes and other neurological disorders.

This project has served to strengthen the health care system in the state of Mississippi through planning, education, training, demonstration and operational clinics making more services available to people in areas away from large centers. There has been a side benefit of this project which has resulted in an overall increase in health related manpower available to extend services. The

project has not resulted in an increase in the number of physicians or specialists in neurology, but the overall effect has been better utilization of medical personnel through development of effective administrative and paramedical manpower and developing the capability of organization of services for the catastrophic or chronic neurological diseases.

One of the weaknesses of this project to date is the fact that education for physicians in connection with this project has been only spotty and incomplete. While referring physicians have been contacted through the clinic project by obtaining summary letters of the patient's condition, not as many physicians have made themselves available for the educational features that are possible in connection with this project as had been anticipated. The reasons for this failure are not clear. The authors would appreciate comments from physicians throughout the state on how this type of educational service could be made more readily available to them if indeed they wish to take part in it.

Funding of this program through the Mississippi Regional Medical Program terminates July 1, 1972. There is need for continuation and expansion of these services for patients with disorders of the nervous system in rural Mississippi. It is hoped that alternate sources of support can be found to continue this system of neurological clinics and supporting services.

The participants in this comprehensive neurology clinic project invite constructive criticism from all physicians and paramedical persons in the state of Mississippi and hope for continued cooperation between physicians in various portions of the state and this effort until sufficient specialists can be made available in the out-state areas to take over these much-needed functions. ★★★

2500 North State Street (39216)

This project was supported by USPHS grant No. 5-G03-RM-00057-03 through the Mississippi Regional Medical Program.

THE AMERICAN COMEDY

The American way is condemning an x-rated movie; buying a ticket to see if it's as shocking as advertised; and complaining because the most scandalous parts have been cut.

The Blind Child

ROGER L. HIATT, M.D.
Memphis, Tennessee

THE BLIND CHILD has pulled at the "heart strings" of parents as well as others since biblical times. This has led to numerous organizations being interested in the prevention of blindness and treating diseases of the blind. These include the National Society for the Prevention of Blindness, Fight for Sight, Research to Prevent Blindness, Lion's Clubs, Knights Templar, Southern Dames, and other such organizations.

If the onset of blindness is from birth, two considerations must be given. First, is there blindness alone; or secondly, is there blindness plus other anomalies? If blindness has been present since birth with or without associated anomalies, parents are more ready to accept the blindness than if it is acquired later in life. If they have other anomalies, these may so far outweigh the problems of the child that blindness becomes secondary in importance.

If the blindness occurs early in life, the child may have had a few years to learn to walk, talk, hear, and manipulate before losing his sight. In this case, the child's blindness may not be as readily accepted by the parents as if it had been there since birth.

Whether we are speaking of adult or child blindness, we must realize that there are at least four types of "blindness."

(1) Total Blindness—in which there is an absence of light perception.

(2) Legal Blindness—defined in most states as less than 20/200 vision, or less than 20 degrees of visual field in diameter in its widest meridian, in the best eye. Legal blindness, unfortunately, does not tell how much "functional loss" the patient has, and one person with 20/200 vision might do quite well compared to another with the same reading on the Snellen Chart.

(3) Social Blindness—refers to that inability to engage in useful daily social activities without special helps.

(4) Subnormal Vision—could be defined as any vision which is not normal, but in practice it means roughly any vision less than 20/70, in the best eye.

The author discusses the blind child in all aspects including onset of blindness, types of blindness, prevention of blindness, treatment, education and the low vision aids that are available to the blind. He emphasizes that the blind child must be treated optimistically if he is to be helped physically, emotionally and educationally.

Prevention of blindness certainly deserves the most acute attention, particularly with children. It involves three phases.

The first phase is early detection. Not only is early detection important in adults when they have their annual physical, get a driver's license, go for industrial screening, and so forth, but it is equally important in the schools. "Amblyopia Day" is scheduled in many of our schools. In 1966, "Amblyopia Day" was begun in Memphis, and in that year 12,018 children were screened, and 689 were referred for possible amblyopia. Likewise, during the same year, the school vision screening program sponsored by the Health Department in conjunction with the Department of Education, screened 30,120 children of which 14 per cent were found to have some visual defect and required referral.

The second phase of prevention is early treatment. The National Society for the Prevention of Blindness has stated that one half of all blindness is preventable today by treatment with the present day means. This points out the importance of education of the public to the availability of preventive eye care.

Presented before the Section on EENT, Mississippi State Medical Association, Biloxi, May 6, 1971.
From the Department of Ophthalmology, University of Tennessee College of Medicine.

The third phase of prevention is the prevention of disease and injury. Certainly this involves education, but in addition, particular attention should be given to the prevention of trauma. Around Christmas time, it is not uncommon in the average city to see several children injured with B-B guns, knives, firecrackers, bows and arrows, glass, and so forth. This can be prevented by better education and better cooperation on the part of the parents. Many laws, such as the one enacted in Tennessee two years ago, require hardened lenses for shop-classes for the children in public schools. Recent rulings of the FDA as to prescription lenses and sunglasses being of the hardened type will have a long-term affect on lessening eye injury.

TREATMENT

The treatment of the child or adult with blindness or visual handicap regardless of the degree involves basically six things:

(1) Medical and surgical treatment of the eyes to correct whatever is possible by the best known scientific means.

(2) Optical treatment with glasses, whether they be regular glasses or glasses of special design for the partially sighted.

(3) Dealing with the daily living problems. Many states have schools, such as the Arkansas Enterprises for the Blind, to train the recently, or for that matter, the not too recently blinded child or adult in taking care of daily living and activities so that they might more easily adapt to avocational and occupational needs.

(4) Occupational. All states have some agency that is responsible for rendering aid to the blind and visually handicapped by training, medical and surgical services, financial aid, and so forth.

(5) Educational. The education of the blind child is of paramount importance.

(6) Physical treatment. The child must be treated not only physically, but emotionally as well.

Education of the blinded child is a primary concern to all. Resident schools for the blind, such as the one located in Nashville, are reserved these days more for the multiple handicapped child or for the totally blind child that can not, even with special teaching and help, manipulate in any average or special school environment.

The second question in reference to the teaching of the blind is the use of braille. In general, this is reserved for the individual who with the best optical aids following medical and surgical therapy is unable to read adult standard type print. Therefore, this gives him at least one method of communication.

"Sight-saving" classes are available in many areas and are sometimes called the "resource room" classes. With the use of special large print books, special attention to the child in a preschool kindergarten, and with the use of special lighting, chalk boards, large typewriters, and so forth, most of the partially seeing children can be educated near home, without having to be sent for their education to a resident school for the blind.

LOW VISION AIDS

One must remember that low vision aids are primarily reserved for the adult, in that the child with his terrific accommodation remaining (assuming that he is still phakic) is able to read most print close to his face with his own "built-in" magnification without the use of many of the optical aids. However, if low vision aids are going to be prescribed, one must use large testtypes such as provided by the Keeler Optical Company's Low Vision Test Book. There are basically five types of aids available. These are:

(1) Regular glasses.

(2) Contact lenses.

(3) Telescopic lenses.

(4) Specially ground lenses to eliminate aberrations, such as aspheric conoid and microscopic lenses.

(5) Various hand, stand, illuminated, and other types of magnifiers. One must test the patient and then select from these numerous aids the type of aid that will be the most helpful to the child in his environment. In general, the aids are prescribed more for near than distance, and more for adults than for children, and more glasses with high powered aids than any other type. There are a few additional aids available such as reading guides, special writing paper, special pencils, telephone dials, special playing cards, etc.

In reference to future developments there is hope that some of the "electric canes" or the "touch reading" or television projectors or implanted electrodes might lend some new methods of education to the blind child which are not presently available today.

We must remember that the child with blindness should be viewed in an optimistic fashion, and not pessimistically, if he is to be helped physically, emotionally, and educationally: that is, to view blindness never as an asset, but not necessarily as a liability. ★★★

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This paper was supported in part by the U. S. Public Health Service Grant No. EY-00056.

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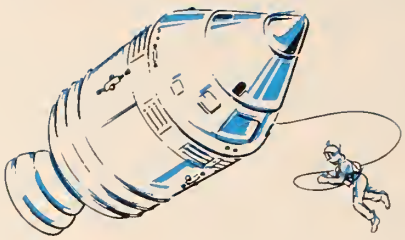
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Radiologic Seminar CXVIII: Laryngography

CLYDE A. ELLIS, M.D.
Jackson, Mississippi

THE PURPOSE of this article is to familiarize the clinician and practitioner with the availability and usefulness of the laryngogram. By definition, this is a method of study of the structure and function of the larynx and hypopharynx, using an opaque contrast material to coat the mucosa of these structures.

The function of the laryngogram includes: (1) to accurately describe the position of neoplasms in the laryngeal region, (2) to determine the limits of the tumor mass and possibly extent of spread to surrounding structures (staging of tumors), and (3) to evaluate impaired function of the pharynx and laryngoesophageal complex. It is also used to determine the best mode of treatment (surgery or irradiation) and to demonstrate the response of lesions to irradiation.

This study was first introduced into the United States in 1957 by William E. Powers of St. Louis. Laryngograms have been performed at the University Medical Center for several years and have proven very useful.

The study should be complementary to laryngoscopy and should be performed prior to endoscopy because resultant edema will obscure the underlying lesion.

In a controlled study, laryngography proved to be 92 per cent accurate in regard to preoperative assessment compared to 78 per cent with clinical and endoscopic examinations combined. The tumor size can be determined for all sites to within 0.3 to 0.6 cm.

Laryngography is easy to perform and requires no longer time than that required to do a GI series. The procedure is explained to the patient beforehand and the different maneuvers practiced. The patient is premedicated with Atropine 0.4 mg. IM about 45 minutes prior to the study. This is very important so that proper coating of the mucosa with the contrast agent can be

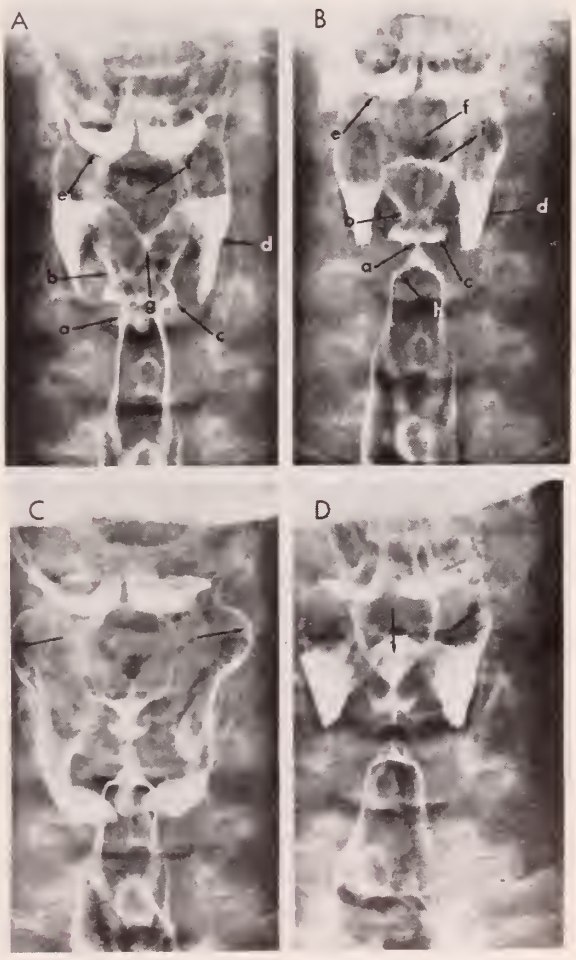


Figure 1. Normal laryngogram, posteroanterior views. A. Inspiration: The true cords (a) and false cords (b) retract. Note also ventricle (c), pyriform sinuses (d), valleculae (e), vestibule (f), and the interarytenoid groove (g). B. Phonation: The vocal cords approximate in midline. The subglottic angle (h) and the postcricoid line (i) are sharply defined. C. Modified Valsalva: The hypopharynx is distended and the lateral pharyngeal wall (arrows) balloon out around the thyroid cartilage. D. True Valsalva: The hypopharynx and larynx are contracted. Note the pooling of the contrast (arrow) in the vestibule.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University Medical Center, Jackson, Miss.

achieved. The throat is then sprayed with two or four per cent topical xylocaine until satisfactory anesthesia is achieved. In addition, xylocaine is introduced into the laryngeal region through a curved cannula.

Powers recommends oily Dionsil as the contrast agent. The Dionsil is introduced into the larynx either through a curved cannula or through a #14 or #16 French catheter positioned with its tip in the posterior oropharynx through the nose. The patient is instructed not to cough or swallow during the procedure.

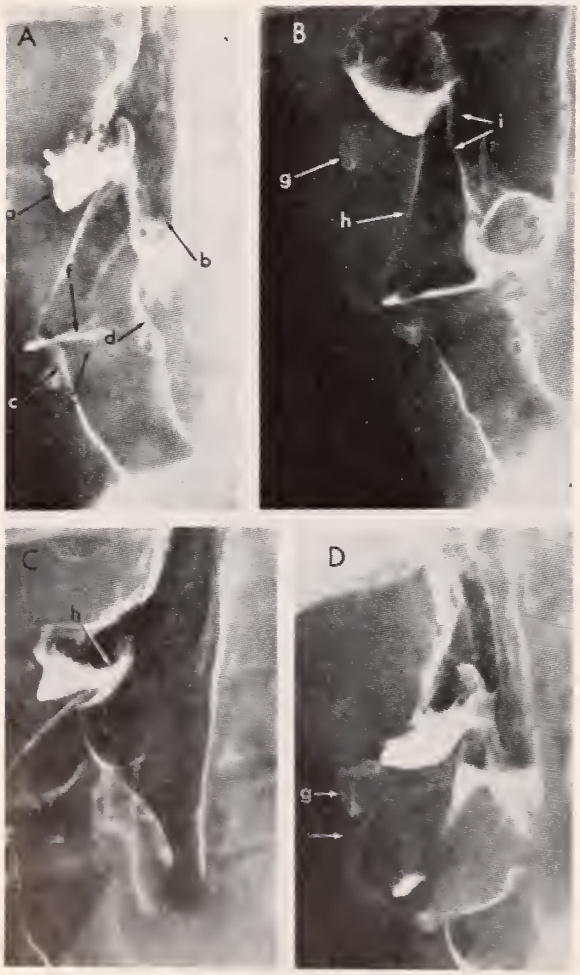


Figure 2. Normal laryngogram, lateral views. A. Inspiration: The valleculae (a) and pyriform sinuses (b) are filled with contrast material. Both the anterior commissure (c) and the interarytenoid region (d) are well visualized because the vocal cords (e) are retracted. Note the collapsed ventricle (f). B. Phonation: Elevation of the hyoid bone (g) and a more vertical position of the epiglottis (h) change the contour of the valleculae. Note the aryepiglottic folds (i). C. Modified Valsalva: The hypopharynx and vestibule are distended. The epiglottis (h) is tipped back. The lower third of the anterior wall of the vestibule (arrow), which is below the epiglottis, is pliable and changes from a convex to a concave configuration. D. True Valsalva: The hyoid bone (g) descends to rest on the thyroid cartilage (arrow).

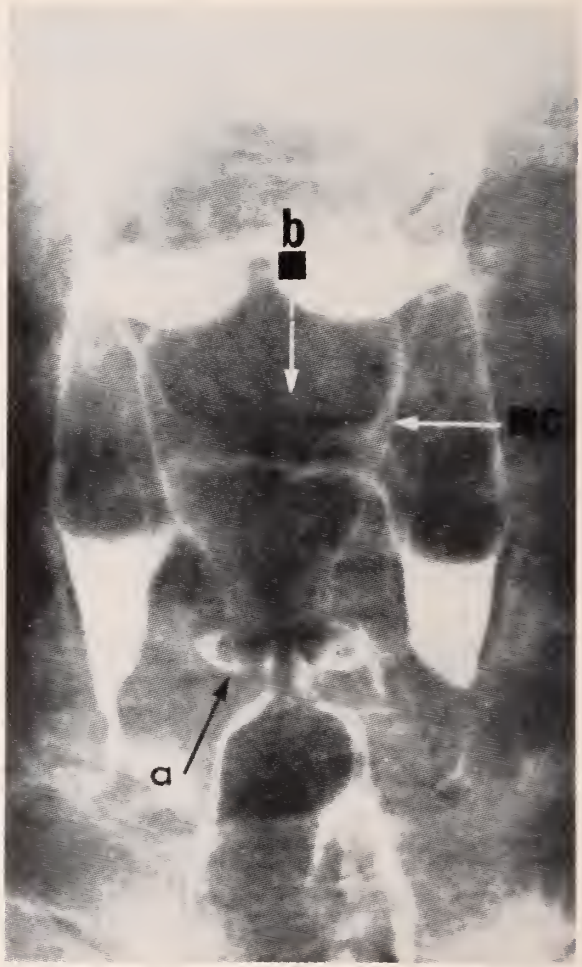


Figure 3. Normal laryngogram, reverse phonation. Reverse phonation: The ventricles (a) distend. The vestibule (b) is broad. The medial wall of the pyriform sinus (c) is clearly shown.

The following maneuvers are performed and spot films are taken in the lateral and AP or PA projections: (1) normal respiration—The true cords are fully retracted on inspiration; (2) phonation "eee"—The true cords approximate. The tongue is displaced forward and the valleculae widened on the lateral view; (3) modified valsalva (blowing against closed lips with the glottis open)—This distends the hypopharynx; (4) true valsalva (strain down against closed glottis) —This squares the subglottic angle; and (5) reverse or inspiratory phonation—This displaces

the true cords downward and thus the ventricles enlarge.

The vestibule and glottis are best seen on the inspiratory and phonation views. The subglottic area is best evaluated on the true valsalva maneuver. The modified valsalva maneuver best demonstrates the arytenoids and pyriform sinuses, and the ventricles are best seen and evaluated on the reverse phonation maneuver.

All of the films must be examined for persistent abnormalities. The reader is encouraged to refer to the references for a thorough description of the normal laryngographic findings. On the frontal films comparison of bilateral structures is very necessary. Complete symmetry is usual in the region of the true and false cords, ventricles, and immediate subglottic space. In the pyriform sinuses, the lateral walls and their apices are frequently asymmetrical. Also the valleculae are frequently unequal.

In summary, there is described a procedure that is relatively easy to perform and may be of considerable help to the clinician and practitioner as well as the radiologist. ★★★

2500 North State Street (39216)

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Some patients, though conscious that their condition is perilous, recover their health simply through their contentment with the goodness of the physician.—HIPPOCRATES.



The President Speaking

'Some Goals to Strive For'

CHARLES R. JENKINS, M.D.
Laurel, Mississippi

IN THIS, MY FIRST MESSAGE to my fellow doctors, I deem it wise to discuss with you some of the goals which I, as your president, will strive to attain in the next 12 months. Some of these are ideas gleaned from conversations with leaders of our profession, while others are mandates from our House of Delegates which are to be carried out by your general officers and the Board of Trustees working in conjunction. All of these goals are worthwhile and worthy of your consideration.

The first goal in order of importance is the furtherance of the medical care foundation. This is a mandate from the House of Delegates and the implementation of a workable strong foundation embracing at least 85-90 per cent of our membership will be the prime goal of all your officers. At present the chairman and other members of the board of trustees are formulating a workable plan to be followed in presenting a concise and practical concept of the Mississippi Foundation for Medical Care.

The second goal is to assist in every way possible the construction of a strong family practice residency program at the University of Mississippi Medical School. This is also a mandate of the House of Delegates and is a program which your president has been actively engaged in for the past several years. A strong family practice specialty composed of physicians delivering primary and continuing care could very well be medicine's answer to the arrogant bureaucrats who clamor for increased government regulation and participation in the health care field.

Goal number three is that of interesting younger members of the profession in their state association. A state association with the younger members actively involved and participating would result in a vigorous and dynamic organization.

Goal number four is to increase the role of the faculty of the University of Mississippi Medical School in the workings of their state society. There should be complete cooperation between the "academicians" and the "clinicians" because after all most of our problems are mutual. Certainly the number one menace, namely the increasing encroachment of the federal government with its myriad health plans and regulations on the present system of health care education and delivery, is of utmost concern to faculty and practitioners.

Goal number five is to assist the auxiliary in their worthy projects and to give them encouragement and support whenever it is required. These ladies are our most loyal fans, their enthusiasm is contagious. They are almost without exception experts in public relations and can do much to improve our image.

Goal number six is to assist the Mississippi Association of Medical Assistants in increasing their number and to help them with their constructive programs. These men and women work for us and their organization is pledged never to become unionized.

In later messages I will discuss some of these programs in greater detail but at present this brief listing will suffice. I earnestly solicit your support in helping to attain these goals. ★★★



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the 3 phases of Eve



All women are not equal in their endogenous hormonal output. And, while all oral contraceptives are fundamentally effective, they exhibit **differences in their activity levels and estrogen-progestogen ratios that affect different women differently**—in both short and long-term use. Some brands may be insufficient for the woman's needs or else may exceed them.

Searle offers a family of O.C. products that covers the range of women's needs to help you provide the right pill for the right woman at the right time.

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the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slight progestogen dominance. It has an excellent record of patient acceptance.

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Each white tablet contains: ethynodiol diacetate 1 mg / mestranol 0.1 mg

SEARLE

For brief summary of prescribing information see following page.



the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains ethynodiol diacetate 1 mg/ethinyl estradiol 50 mcg.
Each pink tablet in Ovulen-28® and Demulen® 28 is a placebo containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.

the Enovid-E phase

Some women* who secrete **less estrogen** than most do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutism, masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome — intermittent depression
early-cycle bleeding — increased appetite
scanty menses — steady weight gain
vaginal candidiasis

Enovid-E not only provides increased estrogenic activity with low progestogen activity but also contains the only progestogen that is not antiestrogenic. Therefore it offers less [illegible] dose progestogen side effects.

Enovid-E®

Each [illegible]

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

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Each white tablet contains:
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Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

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Where "The Pill" Began

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XIII, NUMBER 6
JUNE 1972

EDITORIALS

Aspiration of Breast Cysts

DIAGNOSTIC ASPIRATION of breast cysts has long been a popular office procedure. Although some areas of controversy still exist, by following a few ground rules aspiration can be a valuable tool for the surgeon and can save the patient many unnecessary operative procedures.

Aspiration should be done on all frankly cystic masses, and occasionally on questionable cystic masses which are situated deep in the breast. If there is any doubt, aspiration is a relatively painless and harmless procedure.

Aspiration should *not* be done in the following instances:

1. Obviously malignant lesions. The diagnosis in these lesions should be proven by surgical biopsy and frozen section with preparation for immediate definitive surgery. Although the danger of dissemination by needle biopsy is extremely rare, there is really no need for aspiration in these lesions.
2. Obviously solid tumors. These should not be aspirated as they, too, should be removed surgically, even though they are benign fibroadenomas or other nonmalignant lesions. Although there is very little trauma associated with aspiration, occasionally a hematoma will result.

It has been our policy for some 20 years to send all of the aspirated fluid to the pathology laboratory for cytological examination. Our instances of positive findings in clear aspirant fluid are practically nil. We have occasionally had positive cytological examinations when the fluid is bloody.

Our present policy is to aspirate all suspected breast cysts, and to send all bloody fluid for cytological examination. If the cyst disappears completely and does not recur, no further treatment is indicated. If the cyst refills, we may aspirate it one additional time. If it recurs after the second aspiration, however, it should be excised surgically.

Cysts which do not disappear completely with aspiration should be removed by surgical excision with preparation for frozen section and immediate mastectomy.

By following these rules, and by using such a simple procedure, many patients are instantly relieved of the anxiety of a possible malignancy and are saved from unnecessary surgery and hospital expense.

GEORGE H. MARTIN, M.D., Associate Editor
Department of Surgery
The Street Clinic
Vicksburg, Miss.

Who Needs the AMA?

The eternal cry is raised, who needs the AMA? What does it do for me? It's too liberal! It's too reactionary! It's too conservative!

Anyone who has followed the AMA knows that the voices of dissension and criticism are now being heard in that organization. As all organizations must change to survive, the AMA is changing. What direction it takes depends on those of you who are interested enough to have a part of the action.

There is not a single physician in this country today who has not benefited from the AMA when one considers the fantastic amount of work that they have done on a national scale in all facets of medicine and public health. A look at their journals, magazines, committees, councils, and task forces will vouch for this.

I think it is morally unacceptable for us to share in the benefits of the AMA without supporting the AMA.

(Excerpt from a speech by Edward Siegel, M.D., president of the Medical Society of New York, to MSNY.)

Editor's Comment:

The AMA is a democratic organization. You can be heard, but only if you voice an opinion. To silently withdraw can only result in harm to the entire profession.

W. Moncure Dabney, M.D., Editor
Crystal Springs, Miss.

DEATHS

Bolton, Karl A., M.D., Medizinische Fakultat der Friedrich-Schiller-Universitat, Jena, Germany, 1945; interned Medical School, Bonn, Germany, one year; ob-gyn, same Sept. 1, 1947-July 1, 1952; ob-gyn fellowship, Jefferson Medical College of Philadelphia, Philadelphia, Pa., Oct. 1, 1952-June 1, 1954; pathology residency, Oklahoma City, Okla., July 1, 1957-June 30, 1960; died April 10, 1972, age 52.

Linder, Felix E., M.D., University of Virginia Medical School, Charlottesville, Va., 1920; interned Charity Hospital, New Orleans, La., two years; died April 11, 1972, age 75.

Stowers, William Kurtz, M.D., Johns Hopkins University School of Medicine, Baltimore, Md., 1926; interned same, one year; president of Homochitto Valley Medical Society, 1956-57; died April 4, 1972, age 69.

PERSONALS

William L. Anderson, formerly of Memphis and Southaven, announces the opening of his office for the practice of medicine and surgery at 1381 State Line Road in Hernando.

John W. Boyd announces the removal of his offices, Boyd Medical Clinic LTD, to the corner of Maryland and 5th Avenue in McComb.

Eugene A. Bush of Laurel was recently honored by the Board of Trustees of Jones County Community Hospital with "Doctor E. A. Bush Appreciation Day." Dr. Bush has retired after practicing medicine for 40 years.

John D. Coffey, Jr., of Natchez took part in the Radiothon for the benefit of St. Jude's Children Research Hospital sponsored by the Natchez Junior Auxiliary and radio station WNAT-WQNZ. Dr. Coffey is a pediatrician.

Walter Crawford of Tylertown recently took a five-day course in "Family Practice Review" at the University of Alabama Medical School in Birmingham.

Charles R. Jenkins of Laurel, MSMA president, was guest speaker at the state convention of the Mississippi Society of the American Association of Medical Assistants on the Gulf Coast. Dr. Jenkins spoke on "The Role of the Medical Assistant in the Present Day Concept of Medical Practice."

W. A. Long, Jr., of Jackson was guest speaker at the annual meeting of the South Jackson Civic League. Dr. Long spoke on the responsibility of parenthood.

Marcelene J. O'Neal of Greenville was one of 503 pediatricians elected to fellowship in the American Academy of Pediatrics at the recent spring session.

C. E. Patton of Durant was elected president of the newly formed Medical Alumni Chapter of Mississippi State University. John C. Longest of State College is secretary-treasurer. The official constitution was presented by William C. Warner of Jackson, orthopaedic surgeon for the Mississippi State athletes.

Perrin N. Smith of Columbus and Lewis D. Lipscomb of Jackson were installed as Fellows of the American College of Obstetrics and Gynecology at the 20th annual meeting in Chicago in May.

Book Reviews

Current Concepts in Dyslexia. Edited by Jack Hartstein, M.D. 212 pages with 34 illustrations. St. Louis: The C. V. Mosby Company, 1971. $12.00.

This book is an attempt to throw light on what has become a very confusing and controversial subject. The author, himself an ophthalmologist, uses a multidisciplinary approach in compiling the book and there are chapters by him, a pediatrician, a neurologist, a psychologist, an orthoptic technician, a speech "pathologist" and several educators.

I found most of the book informative, but for physician readership there is quite a bit of detail concerning educational testing and psychometry. Case histories are discussed in great detail in some chapters, and I found this to be heavy reading.

The author seems to feel that the practicing ophthalmologist should become involved in testing for dyslexia. He suggests several tests of a drawing nature for children to perform in the office. I would think, from an ophthalmological viewpoint, this problem could be diagnosed adequately by history and routine eye examination alone.

Treatment of dyslexia certainly lies in the field of remedial education. The problem is acquainting all educators and teachers with dyslexia and more particularly with its treatment and management. There appears to be a tremendous gap in knowledge in this area, not to mention standardization. I would certainly recommend this book to all educators at all levels, as well as psychologists and psychiatrists who treat children's emotional problems. It would be of interest to neurologists, pediatricians and family physicians, also.

Hopefully, standardized referral channels will develop in order that these children may be treated and trained in a competent manner. It is unfortunate that some "fringe area" therapists have become involved in the treatment of dyslexia in order to commercially exploit the situation. However, progress is being made and this new book is a step in the right direction.

HENRY P. MILLS, JR., M.D.

A Primer of Electrocardiography. Sixth Edition. By George E. Burch, M.D., and Travis Winsor, M.D. 292 pages with 287 illustrations. Philadelphia: Lea and Febiger, 1972. $7.75.

The very modernistic, rust, red, and white cover of this sixth edition serves to forewarn the reader of the up-dated improvements that have transpired. The more recent descriptive terms are used throughout along with the older, more familiar synonymous terms. All of the terms are defined in easy to understand words along with excellent illustrations. There is a total of 287 illustrations, many of which actually contain two or more figures. Almost every new topic is explained with one or two illustrations. It is this very admirable quality that sets this particular electrocardiography text head and shoulders above all others.

In its 292 pages are included an introduction to the hows and whys of the normal EKG, the arrhythmias, clinical applications, an appendix and an adequate index and table of contents. In short, everything of consequence from Einthoven to ventricular gradients is covered in concise detail.

The previous editions of the "Primer" have established themselves as a must for any serious student of EKG interpretations. This sixth edition is recommended, without any reservations, as a worthwhile improvement.

WALTER T. TAYLOR, M.D.

NEW MEMBERS

ANAS PANDELI. Born Istanbul, Turkey, Jan. 1, 1937; M.D., Tip Fakultesi Istanbul Universitesi, Istanbul, Turkey, 1961; interned Second Surgical Clinic, Istanbul, Turkey, one year; surgery, same, 1962-1966; surgery residency, University Medical Center, Jackson, Miss., July 1, 1967-June 30, 1971; elected November 1971 by Central Medical Society.

BOOTH, BERNARD HESS, III. Born Drew, Miss., Mar. 11, 1938; M.D., University of Tennessee College of Medicine, Memphis, 1962; interned City of Memphis Hospitals, Memphis, one year; internal medicine residency, same, 1964-65, fellowship, allergy and immunology, same, 1968-69; elected November 1971 by Central Medical Society.

FALKER, JAMES BENEDICT. Born Springfield, Ill., Aug. 5, 1928; M.D., University of Illinois School of Medicine, Chicago, Ill., 1956; interned Cook County Hospital, Chicago, Ill., one year; ob-gyn residency, same, July 1, 1957-June 30, 1960; ophthalmology residency, Gulf States Eye Surgery Foundation, V.C.; Smith Memorial Eye Clinic, New Orleans, La., June 1, 1968-May 31, 1970; ophthalmology residency, Mobile General Hospital, Mobile, Ala., June 1, 1970-May 31, 1971; elected by Delta Medical Society in April 1972.

LEHAN, PATRICK HUGO. Born New York, N. Y., Nov. 4, 1948; M.D., Georgetown University School of Medicine, Washington, D. C., 1954; interned, same, one year; medicine residency, Jersey City Medical Center, one year; medicine fellowship, same, one year; chief resident, T. J. White Cardiopulmonary Institute, Pollak Hospital 1959-60; research fellowship National Heart Institute, Bethesda, Md.; elected November 1971 by Central Medical Society.

LONGNECKER, MORTON FRANKLIN, JR. Born Winchester, Ind., Dec. 12, 1936; M.D., Indiana University School of Medicine, Indianapolis, Ind., 1963; interned USAF Medical Center, Keesler AFB, Biloxi, Miss., July 1, 1963-June 30, 1964; orthopaedic surgery residency, U. S. Naval Medical Center, Bethesda, Md., July, 1964-July, 1967; orthopaedic surgery residency, University of Iowa, Iowa City, Iowa, July, 1967-Aug., 1968; elected Mar. 1, 1972, by Coast Counties Medical Society.

MCMILLAN, DEAN R. Born Water Valley, Miss., June 5, 1932; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1965; interned University of Texas Medical Branches, Galveston, Tex., one year; general practice residency, Lafayette Charity Hospital, Lafayette, La., one year; elected Jan. 4, 1972 by Central Medical Society.

MOAK, WILSON E. Born McComb, Miss., Feb. 24, 1936; M.D., Baylor University College of Medicine, Houston, Tex., 1962; interned Madigan General Hospital, Tacoma, Wash., one year; ophthalmology residency, Walter Reed General Hospital, Washington, D. C., Sept. 1, 1965-Aug. 31, 1968; elected November 1971 by Central Medical Society.

REED, KENNETH NOEL. Born Greenwood, Miss., Nov. 29, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1964; interned Baptist Memorial Hospital, Memphis, Tenn., one year; otolaryngology residency, City of Memphis Hospitals, Memphis, Tenn., July 1, 1965-June 30, 1969; elected January 1972 by Central Medical Society.

SINGLEY, THOMAS R. Born Meridian, Miss., Aug. 4, 1940; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1965; interned Parkland Hospital, Dallas, Tex., one year; ob-gyn residency, University of Texas Southwestern Medical School, Dallas, July 9, 1968-July 8, 1971; elected January 1972 by Singing River Medical Society.

SMITH, GEORGE VIRGIL. Born Jackson, Miss., June 15, 1932; M.D., Harvard Medical School, Boston, Mass., 1957; interned Charity Hospital, New Orleans, La., one year; general surgery residency, Hartford Hospital, Hartford, Conn., July 1, 1959-June 30, 1964; elected January 1972 by Central Medical Society.

THOMPSON, ROBERT BROCK. Born Sarnia, Ontario, Canada, June 24, 1929; M.D., University of Western Ontario Faculty of Medicine, London, Ontario, Canada, 1953; interned Victoria Hospital, London, Canada, one year; postgraduate in pathology, same, 1955-58; postgraduate in pathology, Mt. Auburn Hospital, Cambridge, Mass.,



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Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
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- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
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50 mg. Tablets

Talwin

brand of

pentazocine

The long-range outlook

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®) may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (1583)

50 mg. Tablets

Talwin®

brand of **pentazocine** (as hydrochloride)

the long-range analgesic

1958-59; pathology residency, Medical College of Georgia, Augusta, Ga., 1959-60; elected January 1972 by Central Medical Society.

VISE, GUY T., JR. Born Meridian, Miss., Sept. 18, 1939; M.D., Tulane University School of Medicine, New Orleans, La., 1965; interned Charity Hospital, New Orleans, La., one year; orthopaedic surgery residency, same, 1966-67; orthopaedic surgery residency, Scottish Rite Hospital, Decatur, Ga., Jan., 1968-June, 1968; orthopaedic surgery residency, Rancho Los Amigos Hospital, Downey, Calif., July, 1968-Dec., 1968; orthopaedic surgery residency, Charity Hospital, New Orleans, La., Jan., 1969-June, 1970; elected by Central Medical Society January 1972.

WELDY, JOSEPH F. Born Laurel, Miss., Oct. 26, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1963; interned Mobile General Hospital, Mobile, Ala., one year; surgery residency, same, July, 1964-June, 1968; elected 1971 by West Mississippi Medical Society.

Cancer Institute Seeks Referral Patients

The cooperation of physicians is requested in the referral of patients with melanomas and sarcomas of soft tissue and bone for studies being conducted by the National Cancer Institute's Surgery Branch at the Clinical Center, National Institutes of Health, Bethesda, Md.

Needed are patients with primary tumors and those with limited metastases which are amenable to primary surgical treatment. Selected patients will be admitted to combined surgery, chemotherapy, and immunotherapy protocols.

Patients treated will receive adjuvant therapy according to criteria based on tumor anatomic location and histologic type. Immunologic studies will be performed preoperatively and at intervals postoperatively to monitor the effects of adjuvant therapy and provide sensitive means of follow-up for earlier detection of recurrent tumor.

Upon completion of their studies, patients will be returned to the care of the referring physician who will receive a summary of findings.

Physicians interested in having their patients considered for admission to these studies may write or telephone: Dr. Alfred S. Ketcham, Clinical Center, Room 10-N-116, National Institutes of Health, Bethesda, Md. 20014. Telephone: 301-496-4164.

Dr. Costilow Elected Foundation President

Dr. Millard S. Costilow was elected president of the Mississippi Foundation for Medical Care at the Foundation's Board of Directors meeting in April.



Dr. Costilow

Dr. Costilow, a pioneer member and chairman of the association's Committee on Peer Review, organized in 1970, is in general practice in North Carrollton.

The Mississippi foundation was chartered in the summer of 1971 and at that time Dr. Costilow was named to the board of directors.

The MFMC is a wholly-owned, nonprofit, voluntary corporation controlled by the Mississippi State Medical Association. There are two classes of membership, administrative and participating. Administrative members are the Trustees of the state medical association who appoint the foundation's board of directors and who may amend the by-laws of the foundation.

Participating members are those physicians either members of MSMA or who are fully qualified for membership, who voluntarily apply for membership to avail themselves of foundation benefits.

The Mississippi foundation is committed to peer review, the medical profession's assuming leadership in medical care, and it sponsors and conducts utilization review.

Southern Ob-Gyn Seminar Scheduled

The annual Southern Obstetrical and Gynecological Seminar will be held at the Grove Park Inn, Asheville, N. C., July 23-28.

Subjects to be covered include broad fields of obstetrics and gynecology.

For further information, write Dr. George T. Schneider, The Ochsner Clinic, 1514 Jefferson Highway, New Orleans, La. 70121.

What's on your patient's face...

may be more important than his chief complaint

The lesions on his face may be solar/actinic — so-called "senile" keratoses...and they may be premalignant.

Solar, actinic or senile keratoses

These lesions may be called by several names, but they usually can be identified by the following characteristics: the typical lesion is flat or slightly elevated, of a brownish or reddish color, papular, dry, rough, adherent, and sharply defined. They commonly occur as multiple lesions, chiefly on the exposed portions of the skin.



Patient P.T. seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.*

Sequence of therapy/ selectivity of response

After several days of therapy with Efudex® (fluorouracil), erythema may begin to appear in the area of the lesions; the reaction usually reaches its height of unsightliness and discomfort within two weeks, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied.

Acceptable results

Treatment with Efudex provides highly favorable cosmetic results. Incidence of scarring is low. This is particularly important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.



Patient P.T. seen on 6/12/67, seven weeks after discontinuation of 5%-FU cream. Reaction has subsided. Residual scarring not seen except for that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.*

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

This patient's lesions were resolved with

Efudex® (fluorouracil)

5% cream/solution

...a Roche exclusive

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Nutley, N.J. 07110

Urologic Cancer Program Planned

The First National Conference on Urologic Cancer, sponsored by the American Cancer Society, will be held Mar. 29-31, 1973, at the Shoreham Hotel in Washington, D. C.

The objective of this conference is to summarize the present knowledge in the field of urologic neoplasms for an interdisciplinary professional audience including the general practitioner, internist, surgeon, pediatrician, radiologist and urologist.

All members of the medical and related professions and medical students are invited to attend. Advance registration is requested. There is no registration fee.

Inquiries should be directed to: Dr. Sidney L. Arje, First National Conference on Urologic Cancer, c/o American Cancer Society, 219 East 42nd Street, New York, N. Y. 10017.

Two Mental Health Centers Are Funded

Community mental health center staffing grants have been funded in Region 5 and Region 10, both regions having waited for almost a year to receive this news.

A staffing grant of $328,203 has been awarded to the Region 10 Regional Commission on behalf of the Weems Community Mental Health Center at Meridian (Clarke, Jasper, Kemper, Lauderdale, Neshoba, Newton and Scott). The grant period begins March 1, 1972.

A staffing grant of $227,503 was awarded to the Commission on Mental Illness and Mental Retardation for Region 5 on behalf of the Delta Mental Health Center in Greenville (Bolivar, Issaquena, Sharkey and Washington). The grant period begins July 1, 1972.

Staffing grant applications for both centers were approved last year, but have been awaiting funding. During this period the centers have provided active interim programs through the use of all local funds. The two centers will now be able to employ a full staff complement and institute comprehensive services for their respective regions.

Pre-Sate®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

WARNER-CHILCOTT
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

for the practical generation Pre-Sate® (chlorphentermine HCl)

the trend is toward our kind of anorectic

Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage



GP-21-B/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyci hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in no less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

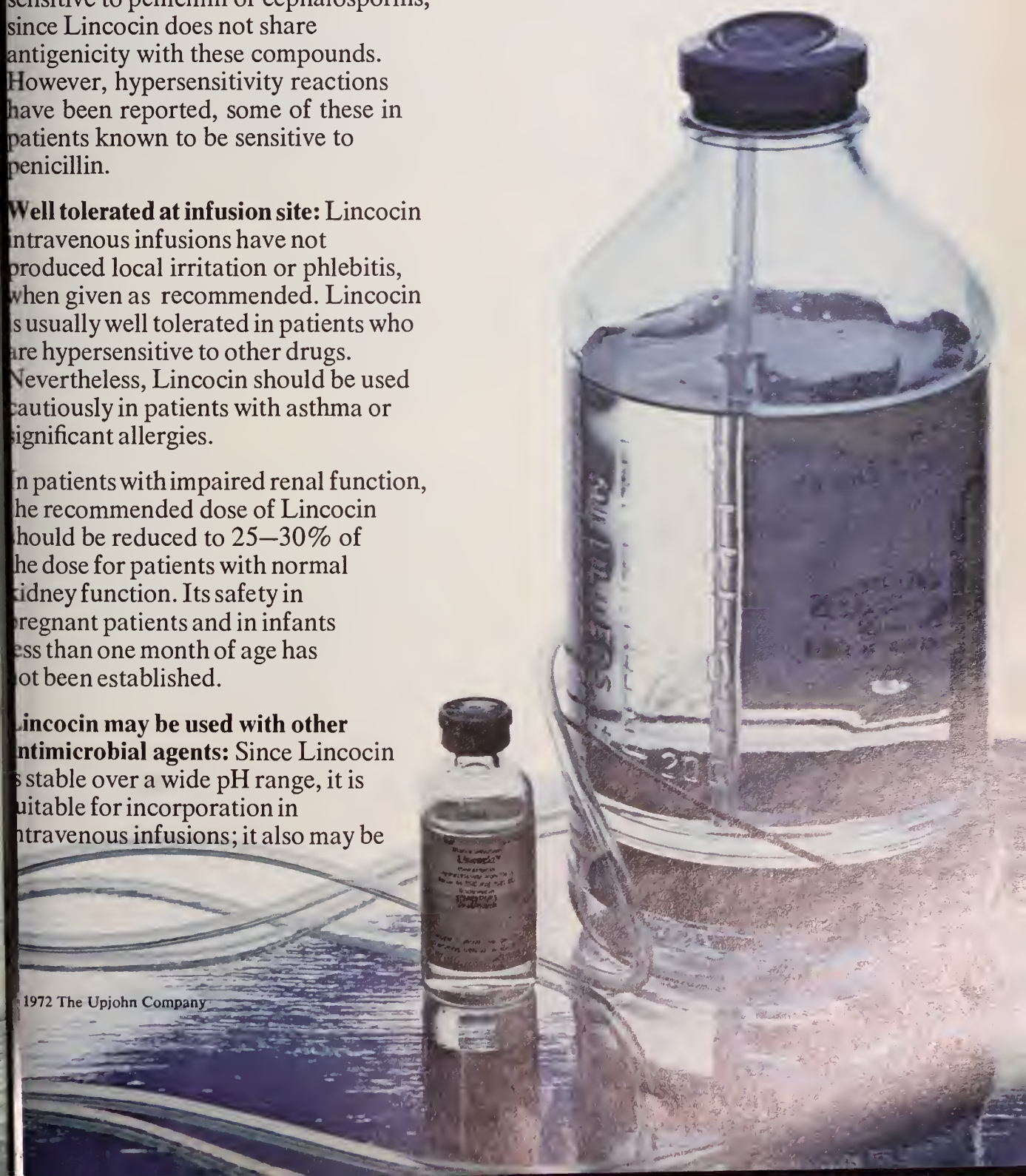
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



© 1972 The Upjohn Company



Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatme
Skin and mucous membranes—Skin rash urticaria, vaginitis, and rare instances of foliative and vesiculobullous dermatitis ha been reported. *Liver*—Although no direct lationship to liver dysfunction is establish jaundice and abnormal liver function te (particularly serum transaminase) have be observed in a few instances. *Cardiovascu* —Instances of hypotension following par teral administration have been report particularly after too rapid IV administ tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more adm istered IV, dilute in 500 ml of fluid a administer no faster than 100 ml per ho *Special senses*—Tinnitus and vertigo ha been reported occasionally. *Local reacti* —Excellent local tolerance demonstrated intramuscularly administered Lincoc (lincomycin hydrochloride). Reports of p following injection have been infreque Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distill water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m* Capsules—bottles of 24 and 100. *Ster Solution, 300 mg per ml*—2 and 10 ml vi and 2 ml syringe. *Syrup, 250 mg per 5* —60 ml and pint bottles.

For additional product information, cons the package insert or see your Upjoh representative.

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Kalamazoo, Michigan 49001

Upjoh

Medical Assistants Hold Annual Meet

The Mississippi Society of the American Association of Medical Assistants held its annual state convention on the Gulf Coast April 28-30 in conjunction with Medical Assistants' Week, as designated in a proclamation signed by Governor William L. Waller.

Dr. Charles R. Jenkins, Laurel, president-elect, Mississippi State Medical Society, addressed members and guests at the banquet on Saturday. He discussed "The Role of the Medical Assistant in the Present Day Concept of Medical Practice." Mrs. Lonie Kanak, Richmond, Va., AAMA trustee, intalled new officers.

Mrs. Kanak was Saturday luncheon speaker, where she presented "A Challenge to Medical Assistants." A film, "A Tribute to the Medical Assistant," was shown by a representative from Wyeth Laboratories. Following the luncheon, members were given an opportunity to take the Mini Test, a simulated certified medical assistant examination.



Gov. William L. Waller signs the proclamation declaring the week of April 23-29 to be Medical Assistant Week in Mississippi as two American Association of Medical Assistants, Mississippi Society, physician advisors, Drs. Guy D. Campbell, Jackson, and Charles N. Floyd, Gulfport, and Mrs. Thelma VanCloostere, Long Beach, state president, look on.

Another feature of the meeting was a panel, consisting of Dr. Richard G. Burman, Gulfport, chairman, AAMA physician advisory board; Donald Wilcox, Captain, USAF, Biloxi; and Mrs. Kanak, who discussed "Physician, Lawyer, Medical Assistant and Their Relationship to Medical Law."

Mrs. Helen Donohoo, Gulfport, past-president of Coast Counties chapter, served as convention chairman. Members of her committee were Mrs. Marquerite Bond, Mrs. Betty Trammell, Mrs. Carolyn Gerald, Mrs. Beverly Wallace, Mrs. Joanne Armes, Mrs. Lautain Scruggs, and Mrs. Lois Powell.

Chapter presidents attending were Mrs. Mary Brooks, Central, Jackson; Mrs. Carolyn Gerald, Coast Counties, Gulfport; Mrs. Gladys Lamb, Delta, Greenwood; Mrs. Jennifer Hendley, Hattiesburg; Miss Joy Stewart, Meridian; Mrs. Joyce Keeton, Northeast, Tupelo; and Mrs. Mary Lou Rushing, South Central, Brookhaven.

Professional Consultants Roster Published

Help from an objective source is available to doctors who seek assistance with the office books, income taxes, personal finances, and other business matters. In fact, a national list of "helpers" is available from the Society of Professional Business Consultants.

Members of the Society of Professional Business Consultants help thousands of doctors each year to practice their profession better by worrying less about their business affairs. The society is a national association whose members specialize in counseling physicians and dentists on business matters.

As a service to doctors, the society has just published a new membership roster. It includes a geographical index showing which of its member firms work in each of the 50 states and some areas of Canada.

The roster also lists the varied services offered by SPBC firms, and emphasizes that the society's strict code of ethics prohibits them from accepting fees, commissions or rebates from firms whose goods or services they recommend. "We have no axe to grind" is the consultants' credo.

SPBC firms offer services ranging from one-shot surveys to regular supervision of all aspects of the doctor's professional—and, if he wishes, personal—finances. Details vary, but most firms provide counsel on practice management, office organization, systems application, money management, tax planning, and estate building. Fees are usually based on time spent plus expenses actually incurred.

For a free copy of the SPBC roster, write to the Society of Professional Business Consultants, 221 North LaSalle Street, Chicago, Ill. 60601 or call (312) 346-1862.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 18-22, 1972, San Francisco. Clinical Convention, Nov. 26-29, 1972, Cincinnati. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi Academy of General Practice, Annual Meeting, July 13-15, 1972, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Mississippi State Medical Association, 105th Annual Session, April 30-May 3, 1973, Biloxi. H. Cody Harrell, Acting Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie Street, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

Dr. Jenkins Is Inaugurated President, Dr. Derrick Is Named President-elect

Dr. Arthur A. Derrick, Jr., of Durant was named president-elect of the association at the closing meeting of the 104th Annual Session, and Dr. Charles R. Jenkins of Laurel was inaugurated 1972-73 president, succeeding Dr. Arthur E. Brown of Columbus.

The four-day meet was headquartered at the Sheraton-Biloxi and featured three combined meetings of the seven scientific sections, two plenary sessions on socioeconomic topics, meetings of 14 specialty societies, and medical alumni and social occasions. More than 30 essayists presented a varied program which drew praise of registrants.



Three years of the association's presidency are represented by, from left, Drs. Arthur A. Derrick, Jr., of Durant, the new president-elect, 1973-74; C. R. Jenkins of Laurel, 1972-73; and Arthur E. Brown of Columbus, 1971-72.

The Coast annual session had a registration of 751 which included 372 members, 65 M.D. guests, 27 interns, residents and medical students. Others included 101 exhibitors, 178 Auxiliary members, and 8 staff.

Handling a heavy business agenda, the House of Delegates acted on 24 reports, 11 of which were from the Board of Trustees, and 9 resolutions. Five reference committees conducted hearings before which members and guests appeared for discussion and debate.

Dr. Arthur E. Brown addressed the opening meeting of the House on May 8 on the national medical picture and the activities of the AMPAC



Dr. Wesley W. Hall of Reno, Nev., president of the American Medical Association, appeared as principal guest speaker of the annual session. He addressed the House of Delegates at the opening meeting.



Past presidents of the association enjoy fraternal and traditional breakfast with special guests, Drs. Brown and Jenkins, candidates for select circle. Below, chairman of two of the reference committees report to the House of Delegates at its concluding session. From lower left, they are Drs. Daniel T. Keel, Jr. of Brookhaven, chairman of the Reference Committee on Reports of Officers and Board of Trustees; and William M. Gillespie, Jr., of Meridian, chairman of the Reference Committee on Rules and Order of Business.





104th Annual Session, May 8-11, 1972

DELEGATES ACT ON MAJOR ISSUES AT BILOXI

The House of Delegates of the 104th Annual Session of the Mississippi State Medical Association handled a busy agenda of 24 reports and 9 resolutions.

Hearings were conducted by reference committees before which discussion and debate were heard on Monday, May 8. The committees reported to the House at the Thursday adjourned meeting on May 11 where floor action took place, also with discussion and debate.

The House received Resolution No. 2 on legislation to prohibit chiropractors and Resolution No. 3, regulation of chiropractors. In a substitute resolution, the House authorized the Board of Trustees "to negotiate with the Attorney General of the State of Mississippi to introduce proper and fitting legislation to prohibit this cult from acting as a scientific provider of health services."

Resolution No. 4 by the Northeast Mississippi Medical Society was passed and requests that the Mississippi State Medical Association recommend that a management consultant firm be employed to make a survey of AMA headquarters and report to the 1972 clinical session. Because of declining membership in AMA and rumors of discontent in the headquarters staff, there may be need for improving the administration and making the association stronger, stated the resolution.

Central Medical Society in Resolution No. 5 expressed appreciation to Mr. Rowland B. Kennedy who recently resigned after more than 21 years of service to the association. The House passed the measure and recommended study by the Council on Constitution and By-Laws to seek a degree of honorary membership for Mr. Kennedy and that a commemorative plaque be presented at an appropriate time.

The House reaffirmed the concept of peer review as set forth by the House of Delegates in 1970 and recommended that "the Board of Trustees of the Mississippi State Medical Association direct necessary legislation to be drafted and introduced in the next regular session of the Mississippi Legislature to provide legal sanction for the Committee on Peer Review of the Mississippi State Medical Association."

Recognizing that the preponderance of people with health insurance in Mississippi do not have coverage for either hospitalization or physician care for newborn infants, the House recommended enactment of legislation for the inclusion of complete coverage for newborn infants in every policy written with maternity benefits in this state. This was referred to the Council on Legislation for early introduction in the 1973 Regular Session of the Legislature.

A resolution to provide an information exchange with Travelers Medicare to determine if there has been or if there is presently a difference in treatment of physicians for services rendered in different parts of the state was amended to authorize the Board of Trustees to establish an information exchange with *all* third party purveyors of medical care.

The House reviewed and approved the new and expanded legislative program which was authorized and financed in 1970. Legislative activities and the Blue Sheet drew praise. The Council on Legislation will continue its efforts to get the state medical examiner act and more liberalized abortion laws passed as well as devoting its efforts to these new mandates from the House of Delegates.

In other actions, the House of Delegates:

—Commended President Brown for his outstanding performance of duty and for his timely address.

—Expressed appreciation to Dr. Raymond S. Martin, Jr., of Jackson for effective service as secretary-treasurer.

—Commended Dr. William E. Lotterhos of Jackson for his many services to the association, most recently as Speaker of the House of Delegates, and wished him success in his new position as chairman of the Department of Family Medicine at the Medical College of Georgia.

—Applauded the work of the 1971 AMA delegates, Drs. G. Swink Hicks of Natchez and C. D. Taylor, Jr., of Pass Christian. The House instructed the delegates to recommend that no change be made in the status quo of those who assist physicians but would look with favor on continuing the study for upgrading the training. The matter was referred to the Board of Trustees and the Council on Medical Education.

—Scheduled the 1973 Annual Session for the Gulf Coast at the Sheraton-Biloxi, April 30-May 3.

—Reaffirmed support of the summer extern program, MECO, developed in partnership with the Mississippi Hospital Association and the Student American Medical Association chapter at UMC and commended the 33 Mississippi hospitals who will accept externs this summer.

—Adopted the report of the Committee on Medicine and Religion and affirmed support of the proposed course for clergymen at the University Medical Center.

—Accepted the report of the Council on Medical Education and Board of Trustees on nurse midwifery, recognizing that the training of nurse midwives is a team effort led by physicians and that there is a need for the services of the nurse midwife in this state.

—Paid respect to those 38 physicians deceased since the 103rd Annual Session.

—Amended Section 2, Chapter IX of the By-Laws to make the Committee on Nursing a constitutional committee.

—Commended the Committee on AMA-ERF for its work with the medical school and medical alumni association in securing voluntary contributions for medical education or research. In April 1972 the total gift to the University Medical Center was $11,470.52.

—Conferred approval on the extensive and varied programs of the Council on Medical Service.

—Adopted the report of the Mississippi Foundation for Medical Care and commended the Board of Directors for their diligent work.

—Approved the report on the Experimental Medical Care Review Organization (EMCRO) and praised the efforts of involved physicians and the EMCRO staff.

—Praised the work of the Council on Scientific Assembly and particularly commended the Council on the inclusion of socieconomic issues and the quality of the scientific program, including closed circuit television with top medical presentations.

—Recognized the Mississippi Medical Political Action Committee's work and applauded the Committee for the three awards received at the AMA Public Affairs Workshop in Washington, D. C.

The Reference Committee on Credentials reported seating 89 delegates on May 8 and 83 delegates on May 11.

Reference committee chairmen serving were Drs. Daniel T. Keel of Brookhaven, Reports of Officers and Board of Trustees; Walter H. Rose of Indianola, Miscellaneous Business; Raymond S. Martin, Jr., of Jackson, Constitution and By-Laws; Arthur A. Derrick, Jr., of Durant, Medical Practices; George D. Purvis, Jr., of Jackson, Budget and Finance; William M. Gillespie, Jr., of Meridian, Rules and Order of Business; Raymond S. Martin, Jr., of Jackson, Credentials.

and MPAC movements. He also discussed the association's EMCRO program.

The 1971-72 president praised the work of the committees and councils of the association along with the Board of Trustees, calling these men "the unsung heroes of our battle to maintain our status as a free organization."

Sharing the rostrum spotlight with Dr. Brown was Dr. Wesley W. Hall of Reno, Nev., president of the American Medical Association, who stressed that physicians must get involved in politics if their voice is to be heard in governmental planning for health care.

A gift of $11,470.52 was made to the University Medical Center by the state association's AMA-ERF campaign.

New vice presidents named to serve in 1972-73 are Drs. Lee H. Rogers of Tupelo, James P. Spell of Jackson, and Wendall B. Holmes of McComb.

Dr. W. Moncure Dabney of Crystal Springs was re-elected editor of the JOURNAL MSMA, and Dr. George H. Martin was named to another term as associate editor.

Dr. John B. Howell, Jr., of Canton was elected Speaker upon the resignation of Dr. William E. Lotterhos of Jackson. Dr. Walter H. Simmons of Jackson was named Vice Speaker of the House of Delegates.

Dr. Joseph B. Rogers was elected to a two-year term as Delegate to AMA, and Dr. Arthur E. Brown of Columbus was named Alternate Delegate to AMA.

Delegates, tallied at 83 in the May 11 balloting, elected Dr. Gerald P. Gable of Hattiesburg District 7 trustee to succeed Dr. W. E. Moak of Richton who had served the maximum of three consecutive terms and was not eligible for re-election. Drs. Everett Crawford of Tylertown (District 8) and James T. Thompson of Moss Point (District 9) were re-elected.

Elected to the Council on Budget and Finance were Drs. J. Daniel Mitchell of Jackson and David L. Clippinger of Gulfport. Dr. James O. Gilmore was made acting chairman of the council.

Dr. Tom H. Mitchell of Vicksburg was re-elected to the Council on Constitution and By-



Dr. Reginald P. White of Meridian was 1972 winner of the MSMA-Robins Award for outstanding community service by a physician. President Brown, left, and Mr. Phil Taylor from the A. H. Robins Company, made the presentation. Dr. Guy T. Wise of Meridian, at right, District 6 Trustee, accompanied Dr. White to the podium.







Members of the Fifty Year Club at annual session participated in their annual special luncheon meeting. Club "officers" were Board Chairman J. T. Davis, at head of table, and Mrs. Barbara Shelton, association director of administrative services who serves as club secretary. Middle left, Dr. Jenkins is inaugurated 1972-73 president, as Acting Executive Secretary H. Cody Harrell holds association's historic Bible and Board Chairman Davis administers oath of office. Lower left, Mr. Hilton Bowers, director of MSMA division of medical care plans, discusses the association's EMCRO project with guest speaker Dr. James Z. Appel, at right, of Lancaster, Pa., consultant for the National Center for Health Services Research and Development.





Upper left, Dr. Stanley A. Hill of Corinth, alternate AMA delegate, confers with Mr. Bernard D. Hirsh, AMA General Counsel who was a guest essayist for the Wednesday morning plenary session. Upper right, Dr. Myron W. Lockey of Jackson, at right, moderator for the Wednesday plenary session, discusses professional corporations with Mr. Arnold J. Streich, director of the AMA Corporate Law Department. Lower photograph shows members of the reference committees enjoying breakfast on May 8. Speaker William E. Lotterhos and vice speaker John B. Howell, Jr., at head table, briefed committee members on rules and order of business to be followed in the afternoon's deliberations.



Laws. Named to the Judicial Council were Drs. James E. Booth of Eupora, Samuel B. Johnson of Jackson, and Charles M. Moore of Philadelphia.

Re-elected to the Council on Legislation were Drs. C. D. Taylor, Jr., of Pass Christian, Everett Crawford, of Tylertown, and A. T. Tatum of Petal.

Dr. Dennis E. Ward of Corinth was re-elected to the Council on Medical Education while Drs. John F. Lucas, Jr., of Greenwood, John R. Lovelace of Batesville, and Jack A. Stokes of Pontotoc were named to the Council on Medical Service.

Specialty Societies Hold Concurrent Meetings

A total of 14 specialty societies met concurrently with the association during the 104th Annual Session at the Sheraton-Biloxi. Scientific sessions and social occasions drew members of almost every specialty.

Pathologists from throughout the state attended the May 7 and 8 meetings of the Mississippi Association of Pathologists. Dr. Roger B. Arhelger of Jackson was named president-elect; Dr. William D. Atchison of Gulfport, president; Dr. Catherine G. Goetz of Jackson, treasurer; and Dr. Roland F. Samson of Jackson, secretary.

The Mississippi Radiological Society met Sunday, May 7, for a scientific session and social hour. Dr. J. V. Ferguson of Greenwood is president. New officers will be elected at the fall meeting.

The Mississippi chapter of the American College of Surgeons convened on May 9 for a scientific session, business meeting and luncheon. New officers are Drs. Raymond S. Martin, Jr., of Jackson, president; Albert L. Meena of Jackson, president-elect; and Richard H. Clark, Jr., of Hattiesburg, secretary.

Preceding the section meeting on May 9, the Mississippi Ob-Gyn Society conducted a luncheon. New officers are president, Dr. Walter L. Bour-



The Woman's Auxiliary, meeting concurrently for its 49th annual session, elected new officers for 1972-73. From left, seated are, Mesdames Clarence H. Webb, Jr., of Jackson, president; and T. E. Ross, III, of Hattiesburg, outgoing president. Standing from left are, Mesdames Ralph Sneed of Jackson, corresponding secretary; Henry H. Webb of Jackson, treasurer; Jim C. Barnett, Jr., of Brookhaven, fourth vice president; W. Steve Sekul of Biloxi, third vice president; Joe D. Herrinton of Natchez, second vice president; John M. McRae, Jr., of Laurel, first vice president; and Baker G. Nagle of Columbus, secretary. Not pictured is Mrs. W. H. Preston, Jr., of Booneville, president-elect.

140/90 is normal blood pressure...or is it?

An extensive study based on nearly 4 million life insurance policies suggests that a blood pressure reading of 140/90 requires close medical supervision.

Study Findings. Twelve years ago the Society of Actuaries reported on an extensive study based on the lives and deaths represented by almost 4 million life insurance policies. From this vast survey—"The Build and Blood Pressure Study"[1]—insurance experts concluded that:

- Blood pressure above 140/90 is accompanied by increased morbidity and requires close medical attention.
- Even small increments in either systolic or diastolic blood pressure progressively and steeply shorten life expectancy.

Other Studies. Studies conducted with large numbers of patients since that time have echoed the above findings. Two studies published in 1970—the VA Cooperative Study Group on "Effects of Treatment on Morbidity in Hypertension"[2] and the "Framingham Study"[3]—suggest that treatment of even mild hypertension may, over time, offer significant benefits to the patient.

Another Point of View. Although a growing body of studies suggests that treatment of mild hypertension is warranted, medical opinion is not unanimous. Some clinicians recommend that drug treatment for mild hypertension be reserved for patients with additional risk factors such as smoking, high cholesterol



levels, heart or kidney involvement, or a family history of vascular disease. Dr. Walter M. Kirkendall stated this position in his recent paper "What's With Hypertension These Days?"[4] Discussing the management of hypertension in patients with a sustained diastolic pressure up to 100 mm Hg, he said: "Generally, I do not recommend antihypertensive therapy unless patient's blood pressure approaches the upper limit for the group and a number of adverse factors exist, such as male sex, family history of vascular disease, youth, evidence of heart or kidney involvement."

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

MSD

25- and 50-mg tablets

HydroDIURIL
(Hydrochlorothiazide) MSD

Therapy to Start With

For a brief summary of prescribing information, please see next page.

1. Society of Actuaries, *The Build and Blood Pressure Study*, 1959.
2. Veterans Administration Cooperative Study Group on Antihypertensive Agents, "Effects of Treatment on Morbidity in Hypertension," JAMA *213*:1143-1152, Aug. 17, 1970.
3. Kannel, William B., *et al*: "Epidemiologic Assessment of the Role of Blood Pressure in Stroke—The Framingham Study," JAMA *214*:301-310, Oct. 12, 1970.
4. Kirkendall, Walter M.: "What's With Hypertension These Days?" Consultant, Jan. 1971.

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

CONTRAINDICATIONS: Anuria; increasing azotemia and oliguria during treatment of severe progressive renal disease. Known sensitivity to this compound. Nursing mothers; if use of drug is deemed essential, patient should stop nursing.

WARNINGS: May precipitate or increase azotemia. Use special caution in impaired renal function to avoid cumulative or toxic effects. Minor alterations of fluid and electrolyte balance may precipitate coma in hepatic cirrhosis.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during initial therapy. Dosage of other antihypertensive agents, especially ganglion blockers, must be reduced by at least 50% because HydroDIURIL potentiates their action.

Stenosis and ulceration of the small bowel causing obstruction, hemorrhage, and perforation have been reported with the use of enteric-coated potassium tablets, either alone or with nonenteric-coated thiazides. Surgery was frequently required, and deaths have occurred. Such formulations should be used only when indicated and when dietary supplementation is impractical. Discontinue immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occurs.

Thiazides cross placenta and appear in cord blood. In women of childbearing age, potential benefits must be weighed against possible hazards to fetus, such as fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

PRECAUTIONS: Check for signs of fluid and electrolyte imbalance, particularly if vomiting is excessive or patient is receiving parenteral fluids. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances. Hypokalemia may develop (especially with brisk diuresis) in severe cirrhosis; with concomitant steroid or ACTH therapy; or with inadequate electrolyte intake. Digitalis therapy may exaggerate metabolic effects of hypokalemia, especially with reference to myocardial activity. Hypokalemia may be avoided or treated by use of potassium chloride or giving foods with a high potassium content. Similarly, any chloride deficit may be corrected by use of ammonium chloride (except in patients with hepatic disease) and largely prevented by a near normal salt intake. Hypochloremic alkalosis occurs infrequently and is rarely severe. In severely edematous patients with congestive failure or renal disease, a low salt syndrome may occur if dietary salt is unduly restricted, especially during hot weather.

Thiazides may increase responsiveness to tubocurarine. The antihypertensive effect of the drug may be enhanced in the postsympathectomy patient. Arterial responsiveness to norepinephrine is decreased, necessitating care in surgical patients. Discontinue drug 24 hours before elective surgery. Orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics.

Pathological changes in the parathyroid glands with hypercalcemia and hypophosphatemia have been seen in a few patients on prolonged thiazide therapy. The effect of discontinuing thiazide therapy on serum calcium and phosphorus levels may be helpful in assessing the need for parathyroid surgery in such patients. Parathyroidectomy has elicited subjective clinical improvement in most patients, but has no effect on hypertension. Thiazide therapy may be resumed after surgery.

Use cautiously in hyperuricemic or gouty patients; gout may be precipitated. May affect insulin requirements in diabetics; may induce hyperglycemia and glycosuria in latent diabetics.

ADVERSE REACTIONS: Rare reactions include thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia, cholestasis, and pericholangiolitic hepatitis. Nausea, vomiting, diarrhea, dizziness, vertigo, paresthesias, transient blurred vision, sialadenitis, purpura, rash, urticaria, photosensitivity, or other hypersensitivity reactions may occur. Cutaneous vasculitis precipitated by thiazide diuretics has been reported in elderly patients on repeated and continuing exposure to several drugs. Scattered reports have linked thiazides to pancreatitis, xanthopsia, neonatal thrombocytopenia, and neonatal jaundice. When adverse reactions are moderate or severe, the dosage of thiazides should be reduced or therapy withdrawn.

For more detailed information, consult your MSD Representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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Speaker Lotterhos addresses House of Delegates on opening day. Top right, Mrs. T. E. Ross, III, outgoing Auxiliary president and Mrs. Clarence H. Webb, Jr., incoming president, report on the Auxiliary's accomplishments and list goals for the coming year. Middle right, winning scientific exhibit by a member was "Aorto-Coronary Bypass Surgery for Relief of Angina Pectoris," by Drs. Thomas L. Kilgore, Jr., and James C. Griffin, Jr., of Jackson. Lower right, winner of the association's Scientific Achievement Award, a bronze sculptured medallion, in recognition of the best presentation by a nonmember was "Coronary Arteriosclerosis Surgical Treatment," by Drs. Charles W. Pearce, White E. Gibson, III, and Rudolph F. Weichert, III, of New Orleans.







Dr. Daniel T. Keel, Jr., of Brookhaven chaired the Reference Committee on Reports of Officers and Board of Trustees which heard a full house of officers, members and guests discuss the various reports and resolutions referred to it. Middle left, Board Chairman J. T. Davis of Corinth introduces the supplemental reports of the Board to the House on Monday, May 8. Lower left, Dr. Millard S. Costilow of North Carrollton, MFMC president, presides over the first meeting of the Mississippi Foundation for Medical Care during an adjournment of the House of Delegates.



Dr. Jack A. Stokes of Pontotoc, at right, Mississippi Flying Physicians Association president, shows the state chapter's exhibit to visiting national president, Dr. Francis X. Sommer of Barbourville, Ky. Middle right, the Mississippi chapter of the American College of Surgeons elected 1972-73 officers at the annual session. From left are Drs. W. Coupery Shands of Jackson, outgoing president; Raymond S. Martin, Jr., of Jackson, president; Albert L. Meena of Jackson, president-elect; and Richard H. Clark, Jr., of Hattiesburg, secretary. Lower left, Dr. Brown, outgoing president, pins president's pin on incoming Dr. C. R. Jenkins. Lower right, Dr. Raymond S. Martin, Jr., association secretary-treasurer, makes yearly financial report to the House.









Mississippi Ob-Gyn Society leaders Dr. Calvin T. Hull, left, secretary-treasurer, and Dr. George Ball, president-elect, both of Jackson, confer over details for concurrent luncheon meeting. Lower left, Dr. James Grant Thompson of Jackson presents Dr. Brown, right, with official past president's pin as President Jenkins observes. Lower right, Dr. Walter H. Rose of Indianola presents the report of the Reference Committee on Miscellaneous Business to Delegates.






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land of Tupelo; president-elect, Dr. George Ball of Jackson; secretary-treasurer, Dr. Calvin T. Hull of Jackson; and vice president, Dr. Ira E. Gaddy, Jr., of Gulfport.

A luncheon meeting on May 10 highlighted the meeting of the Mississippi Society of Internal Medicine. Dr. John R. Shell of Vicksburg was inaugurated president of the society. New officers elected by the internists are Dr. David M. Owen of Hattiesburg, president-elect; and Dr. S. H. McDonnieal, Jr., of Jackson, secretary.

The Mississippi chapter of the Flying Physicians Association held a cocktail party and buffet dinner on May 9. Dr. Jack A. Stokes of Pontotoc was re-elected president, and Dr. William F. Pontius of Canton was named secretary.

Orthopaedic surgeons convened May 8 for a luncheon meeting. New officers are Dr. Magruder S. Corban of Gulfport, president; Dr. John E. Evans of Vicksburg, vice president; Dr. William C. Sanders of Columbus, president-elect; and Dr. Clyde X. Copeland, Jr., of Jackson, secretary-treasurer.

The Mississippi Eye, Ear, Nose and Throat Association conducted a luncheon and business meeting on May 11. Dr. John E. Green of Hattiesburg is president, and Dr. Myron W. Lockey of Jackson was named president-elect. Dr. L. Ben McCarty, Jr., of Jackson is secretary-treasurer.

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The Mississippi Society of Anesthesiologists met on Sunday, May 7 at the Country Club of Jackson. Dr. Robert L. Thompson of Pascagoula was elected president. Other officers are Drs. Thomas J. Marland of Jackson, vice president; Carlos S. Patino of Jackson, secretary-treasurer; Ralph E. Dunn of Jackson, national delegate; and James M. Cooper of Tupelo, alternate delegate.

State urologists gathered at Biloxi on May 8 for a luncheon and business meeting. Dr. M. E. Hinman of Vicksburg assumed the presidency.

Family physicians met at a Mississippi Academy of General Practice luncheon on May 10. Dr. James O. Stephens of Magee is president, and president-elect Dr. Eugene Webb of Itta Bena will take office at the Academy's July 13-15 meeting. Dr. W. B. Hunt of Grenada is secretary-treasurer.

Following the MSMA 104th Annual Session, the Louisiana-Mississippi Ophthalmological and Otolaryngological Society convened at the Broadwater Beach Hotel for a three-day meeting, May 11-13. Dr. Ralph Sneed of Jackson became president. Immediate past president is Dr. Paul L. Marks of Baton Rouge, and secretary-treasurer is Dr. Arthur V. Hays of Gulfport.

Dignitaries Enjoy Ole Miss Party



Enjoying festivities at the annual Monday night Ole Miss Medical Alumni party, held in conjunction with the annual session, are from left, Chancellor Porter Fortune of the University of Mississippi; Dr. Wesley W. Hall of Reno, Nev., AMA president; Dr. Arthur E. Brown of Columbus, 1971-72 MSMA president; and Dr. Robert E. Blount of Jackson, dean and director of the University of Mississippi Medical Center.

Scientific Assembly Begins Work for '73

The 1973 Annual Session is set for April 30-May 3, with headquarters at the Sheraton-Biloxi. The Scientific Assembly has already begun planning for the 105th.

Acting by separate sections during the recent 104th Annual Session, the seven components of the Scientific Assembly named new chairmen, and three sections elected new secretaries.

Under the By-Laws, a section chairman serves a term of only one year, but section secretaries are elected for three years. Each office carries an automatic seat and vote in the House of Delegates to assure proper representation of each scientific section.

Secretaries of the seven sections are on staggered terms so that annual elections are for two, two, and three in any three-year period.

Named to head the Section on EENT is Dr. L. Stacy Davidson of Cleveland. Dr. J. Kinabrew Williams, Jr., of Pascagoula enters the second year of his term as section secretary.

Heading the Section on General Practice is Dr. Frank W. Bowen of Carthage. Dr. W. Boyce White of Laurel continues as secretary.

The internists chose Dr. William L. Wood, Jr., of Tupelo as chairman of the Section on Medicine. Dr. S. H. McDonnieal, Jr., of Jackson enters his final year as secretary of the section.

Dr. Charles M. Head of Jackson heads the Section on Obstetrics and Gynecology. Beginning a term as section secretary is Dr. Charlton R. Vincent of Laurel.

Dr. John R. Jackson, Jr., of Hattiesburg is the new chairman of the Section on Pediatrics. New secretary of the section is Dr. Frank M. Wiygul, Jr., of Jackson.

Dr. Shelby W. Mitchell of Jackson will chair the Section on Preventive Medicine. Entering a three year term as secretary is Dr. Steven L. Moore of Jackson.

New chairman for the Section on Surgery is Dr. William B. Hopson, Jr., of Vicksburg. Dr. Benton M. Hilbun of Tupelo is serving his third year as secretary.

Dr. Raymond S. Martin, Jr., of Jackson, association secretary-treasurer, is constitutional chairman of the Council on Scientific Assembly.

Dr. Martin said, "The Council will be meeting this summer to review preliminary plans for the

105th Annual Session and to begin actively working on the program."

He said that the exhibit prospectus for technical exhibitors will be released this fall. Specialty societies are invited to submit plans for concurrent meetings and requests for assignment of rooms, including those for meal occasions, he added.

The president, Dr. C. R. Jenkins of Laurel, and the president-elect, Dr. A. A. Derrick, Jr., of Durant, are *ex officio* members of the Council on Scientific Assembly under the By-Laws.

Board of Trustees Names 1972-73 Officers

A new name appears on the roster of the association's nine-member governing body, the Board of Trustees. Elected for a three-year term by the House of Delegates was Dr. Gerald P. Gable of Hattiesburg, representing District 7.



Dr. Davis

Dr. Everett Crawford of Tylertown, District 8, and James T. Thompson of Moss Point, District 9, were re-elected to three year terms.

Dr. J. T. Davis of Corinth was re-elected Board chairman. Dr. James O. Gilmore of Oxford is the vice chairman, and Dr. Everett Crawford is Board secretary. The chairman, vice chairman, and secretary make up the Executive Committee.

Continuing to serve are Drs. Lyne S. Gamble of Greenville (District 1), Paul B. Brumby of Lexington (District 4), Carl G. Evers of Jackson (District 5), and Guy T. Vise of Meridian (District 6).

Drs. Davis and Gilmore represent District 3 and 2 respectively. Retiring from the Board after serving the maximum three consecutive three year terms was Dr. W. E. Moak of Richton, District 7.

Seven general officers meet with the Board but without the right to vote. They are the president, president-elect, secretary-treasurer, speaker of the House of Delegates, vice speaker, and AMA delegates.



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AMA Holds Meet on Long-Term Care

The American Medical Association Committee on Aging of the Council on Medical Service will sponsor a Conference on Long-term Care June 20, in conjunction with the AMA annual convention in San Francisco.

The theme is the stroke patient in the long-term care facility. Attendance is open to physicians and other health professionals and there is no registration fee.

The conference will be held in the Golden Gate Room, Del Webb Townehouse.

For advance registration, write the AMA, 535 N. Dearborn St., Chicago, Ill. 60610, Attention Committee on Aging.

Mobile X-Ray Policy Changed

The use of mobile equipment for x-raying members of the general population for tuberculosis and other chest diseases should stop, says a new mass x-ray policy statement prepared jointly by the HEW Food and Drug Administration, the American College of Chest Physicians, and the American College of Radiology.

The kind of equipment found in highway vans in many parts of the country is not productive as a screening procedure for chest disease detection, the statement says.

The statement supercedes a 1958 policy declaration by the Surgeon General of the Public Health Service that emphasizes that mass chest x-rays should be conducted "selectively" with groups "at high risk of tuberculosis infection."

The new policy was signed by Dr. Merlin K. Du Val, Assistant HEW Secretary for Health and Scientific Affairs. The statement was mailed to health officers in all 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and American Samoa.

Records of the number of mobile x-ray units still being used are not available. Twenty-eight states had registered one or more x-ray vans for use in 1970, but several of these have since discontinued use of the equipment. The 1970 information will be updated after July 1 this year, the FDA's Bureau of Radiological Health said.

Dr. Du Val said the new policy was dictated "in large part by the fact that tuberculosis is now almost nonexistent in many regions of the country."

"The use of mobile equipment, which requires relatively higher levels of x-ray exposure than fixed equipment, simply cannot be justified," Dr. Du Val said.

The new policy recommends the use of full size x-ray film when x-ray screening of selected population groups is essential for disease detection. The recommendation is intended to discourage the use of photofluorographic equipment that uses a fluoroscope screen in combination with miniature photographic film. This equipment may expose patients to considerably more radiation than equipment employing x-ray film.

Photofluorographic equipment should be used, the statement says, only if (1) the x-ray image is interpreted by a physician with demonstrated competence in chest x-ray analysis, (2) x-rays and reports can be retained for at least five years for medical diagnosis, and (3) the equipment meets x-ray exposure control requirements of state and Federal regulations and recommendations of the National Council on Radiation Protection and Measurements.

The statement also recommends that stationary chest x-ray facilities be available in a public health department, private medical office, or health center. "Full follow-up treatment facilities must be available as an essential component of the community tuberculosis control program," the statement emphasizes.

Also stressed is the use of tuberculin skin tests in screening for new cases of tuberculosis. The new policy calls for x-ray follow-up only when the tuberculin reaction is positive.

AAP Seeks Early Safety Closure Compliance

The American Academy of Pediatrics is urging manufacturers and consumers to voluntarily affix child resistant safety closures on those items covered in the Poison Prevention Packing Act of 1970 well ahead of the time proposed federal regulations calling for such closures are to be implemented.

Calling for immediate voluntary compliance to such regulations, the Academy's Subcommittee on Accidental Poisoning in its committee statement published with the May 1 *Newsletter,* took note that federal regulations under the Act (P.L. 91-601) were being published in the Federal Register

as of April 1, 1972, and in most instances would take six months to one year to become effective.

"Because of this delay between the dates of publication and subsequent implementation of the regulations, it is clear that voluntary compliance with the proposed safety packaging regulations will be required if a significant impact on childhood poisoning rates from safety packaging is to be seen in the near future," the subcommittee emphasized.

The subcommittee indicated its support of the Poison Prevention Packaging Act of 1970, and stressed the immediate need for voluntary compliance for the following products in anticipation of the dates they will become effective:

(1) aspirin (regulation effective Aug. 15, 1972);

(2) liquid furniture polish (regulation effective Sept. 13, 1972);

(3) methyl salicylate also known as oil of wintergreen (regulation effective late Sept., 1972); and

(4) controlled drugs including all narcotics, barbiturates, and amphetamine-like drugs (regulation effective early Oct., 1972).

In addition, the subcommittee urges that child resistant safety closures be affixed as soon as possible to prescription drugs; proprietary drugs; drain cleaners; petroleum distillates; household pesticides; high phosphate detergents, and bleach products.

The subcommittee added that safety packaging, as part of a comprehensive program for poison prevention, must be closely coordinated with community pharmacists, pharmaceutical societies, proprietary drug manufacturers and manufacturers of household products. The subcommittee concluded that pediatricians should encourage their local pharmacists to comply with the proposed recommendations promptly, and aid the pharmacist with the necessary public education.

O. and O. Academy Plans Annual Meet

The American Academy of Ophthalmology and Otolaryngology will hold its annual meeting Sept. 24-28 at the Convention Center in Dallas, Tex.

For further information or advance registration, contact Dr. C. M. Kos, Executive Secretary-Treasurer, American Academy of Ophthalmology and Otolaryngology, 15 Second Street, S.W., Rochester, Minn. 55901.



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AMA-ERF Check Presented to UMC

The Mississippi Committee on the American Medical Association Education and Research Foundation has presented a check for $11,470.52 to the University Medical Center.

This sum represents $8,991.67 from physicians and Woman's Auxiliary members in earmarked funds and $2,478.85 in undesignated foundation funds distribution.

The Committee on AMA-ERF is an *ad hoc* body of the House of Delegates. Every dollar of the voluntary, tax-deductible contributions goes to medical education or research.

Unearmarked gifts are equally distributed among all accredited four-year medical schools by AMA-ERF. No administrative expense or cost of fund solicitation is taken from gifts. The AMA and state medical associations pay the modest costs of conducting the program.

The MSMA campaign each year is initiated in the fall with the unified computer billing for dues. Mailings are also made by the medical school and the University of Mississippi Medical Alumni Association.

Dr. Raymond F. Grenfell of Jackson is chairman of the association committee, and Mrs. Arthur E. Brown of Columbus is Woman's Auxiliary chairman. Dr. Bobby F. King of Iuka is president of the Ole Miss Medical Alumni Association.



Dr. Raymond F. Grenfell of Jackson, at left, Committee on AMA-ERF chairman, presents a check for $11,470.52 for the University Medical Center to Dr. David B. Wilson, second from left, UMC assistant director for special projects and health care planning. Also participating are Mrs. Arthur E. Brown of Columbus, Woman's Auxiliary chairman, and Dr. J. Dan Mitchell of Jackson, Ole Miss Medical Alumni past president.

Jackson Area Launches Drug Planning Program

A one-year drug abuse planning effort has been launched in the greater Jackson area with the goal of determining the extent of the drug-abuse problem and services needed to combat this problem. It is supported by a one-year federal drug-abuse initiation and development grant awarded to the Hinds County Mental Health Association, which will coordinate the program.

The planning staff is headed by Mrs. Charlene Andrews, former director of the Hinds County Mental Health Association. Other members include Steve Helton as assistant coordinator, Charles Caperton as consultant.

A community agency-citizen planning council will have responsibility for coordinating and guiding all planning activities and for preparation of a program grant application to be submitted at the end of the planning period to insure implementation of plans. Planning will be carried out through task groups "Children and Youth," "Adults," "Crime, Delinquency and Law Enforcement," "Financing of Services and Facilities," and "Legislation." A public information and education committee also has been named.

Each task group will make recommendations to the planning council, which will have final responsibility for integrating recommendations into a comprehensive drug-abuse program plan for the Jackson area. Each member of the planning council will be assigned to one of the task group meetings to insure communication among the groups.

The responsibility of the task groups on Children and Youth and on Adults is to determine the extent and severity of narcotic addiction and drug abuse in the greater Jackson area; to determine the best preventive programs; to determine the source of drugs; to plan diagnosis, treatment and rehabilitation services; and to explore how all drug programs might best be coordinated.

The Crime, Delinquency and Law Enforcement task group will determine the relationship of crime and delinquency to drug abuse and narcotic addiction in greater Jackson and needs in the area of law enforcement and related fields.

The group on Financing of Services and Facilities will determine the financial needs for services and facilities and determine sources for financing services and facilities recommended by the other task groups.

The Legislation task group will evaluate legislation relating to narcotic addiction and drug abuse in greater Jackson, determine legislative needs; and prepare bills for introduction in the next session of the legislature.

Cancer Conference Set for Denver

The 26th annual Rocky Mountain Cancer Conference is set for July 21-22 at the Brown Palace Hotel, Denver, Col.

Co-sponsored by the American Cancer Society, Colorado Division, and the Colorado Medical Society, the program will emphasize "A New and Human Look at Cancer."

There is no registration fee and the course is approved for American Academy of Family Practice credit.

For advance registration, contact the Rocky Mountain Cancer Conference, 1764 Gilpin Street, Denver, Col. 80218.

AMA Will Co-Sponsor Israel Medical Tour

The American Medical Association will co-sponsor with the three principal medical institutions in Israel a 1973 medical conference in Tel Aviv.

Open only to AMA members, their families and guests, the 14-day trip, with 13 days in Israel, will include scientific presentations by leading Israeli authorities as well as visits to medical schools and other medical and research facilities.

Included will be several receptions, ceremonies, and a series of planned excursions to places such as Negev, Beersheba, Massada, Jerusalem, Bethlehem, Jericho, Galilee, Nazareth, Tiberias, Safed, Kibbutz, Nof Ginossar and, of course, Tel Aviv. There will be women's programs, including style shows, while the scientific meetings are in session.

The undertaking is a part of AMA's continued interest in the area of international health and marks the first attempt at co-sponsoring a formal meeting abroad.

Dr. Albert B. Sabin, of U. S. polio vaccine fame and currently president of the Weizmann Institute of Science in Tel Aviv, is the guest host. Also participating in the scientific portion of the program are the Hebrew University—Hadassah Medical School of Jerusalem and the Tel Aviv University Medical School.

Tour participants are scheduled to leave the U. S. Feb. 21, 1973, arriving in Tel Aviv the the following day. Departure from Israel will be Mar. 6. Registration for AMA members is $50.00 and $25.00 for relatives and physician guests. This will include the scientific meetings, a concert by the Israel Philharmonic Orchestra, and other special features.

Each of the three local host institutions will arrange one day of scientific presentations for the participants.

The Weizmann Institute will offer presentations in the area of cancer research and special research being conducted which is of special medical significance.

Presentations on hypertension, treatment of mental diseases, heart disease, and progress in heart valve replacement will be given by the staff at Tel Aviv University Medical School.

Many of the socio-economics of Israel including medical care, medical education, manpower, community medicine, and Israel's contribution to International Health will be offered by the Hebrew University-Hadassah Medical School.

All of the scientific sessions will be at the Hilton Hotel in Tel Aviv.

Subscriptions to the tour will be limited by the availability of hotel space in Tel Aviv.

Group travel arrangements are being coordinated by the Sentinel Travel Bureau of Chicago. Round trip group-fare New York to Israel and return will be $873.00 to $945.00, depending on hotel selection and the number of other stopovers in Europe. The package includes the various excursions scheduled in Israel and breakfast and dinner each day on the excursion. Group-fare reductions will also apply to tickets from home to New York and return. Special side tours can be arranged with the travel bureau for the time before or after the meetings in Israel.

Detailed program of the meetings in Israel can be obtained by writing to the Department of International Medicine, American Medical Association, 535 North Dearborn, Chicago, Ill. 60610.

Arrangements for special sight-seeing tours at group rates can be arranged directly with the Sentinel Travel Bureau, 400 East Randolph Street, Chicago, 60601.

Requests for registration for the medical meeting in Israel should be addressed to the AMA Department of International Medicine, and be accompanied by registration fee remittance ($50.00 per physician and $25.00 per accompanying relative or guest). Such registrants will then be contacted directly by the Sentinel Travel Bureau for specific travel arrangements.

Wisconsin Plans Chemotherapy Conference

The division of clinical oncology of the University of Wisconsin will hold its 10th Cancer Chemotherapy Conference Sept. 6-8, 1972, at the Park Motor Inn in Madison.

The conference is open to all United States physicians interested in cancer chemotherapy. It will review and present a forward look at anticancer therapy of solid tumors and leukemias as well as the role of radiotherapy, immunology and virology in the treatment of cancer.

The guest faculty will include: J. Palmer Saunders, Ph.D., director of extramural activities, National Cancer Institute, Bethesda, Md.; Drs. Loren J. Humphrey, professor and chairman of surgery, the University of Kansas Medical Center, Kansas City; Emil J Friereich, professor of medicine and chief of research hematology, M. D. Anderson Hospital and Tumor Institute at the University of Texas in Houston; and faculty from the McArdle Laboratory for Cancer Research and the division of clinical oncology at the University of Wisconsin-Madison.

For further information contact Dr. G. Ramirez, 714-C University Hospitals, 1300 University Ave., Madison, Wisc. 53706.

ACS Publishes Hospital Cancer Programs List

Authorities agree that without a systematized, hospital-based cancer registry, follow-up of the cancer patient is poor, educational information is lost, conclusions as to end results of therapy are erroneous, and the patient is the ultimate loser. To help hospitals establish and maintain cancer follow-up activities, the Commission on Cancer of the American College of Surgeons periodically surveys hospital cancer programs, and grants approval to those which meet certain basic standards.

The current list of 840 programs approved as of Jan. 1, 1972 appears in full in the April 1972 issue of the *Bulletin* of the American College of Surgeons.

The cancer programs published in the *Bulletin* have been surveyed at the request of their administrators and/or medical staffs. The approval status is based on the level of excellence in relation to the established standards for approval stated in the College's *Manual for Cancer Programs*.

Basically, these standards call for certification by the Joint Commission on Accreditation of Hospitals; a hospital committee on cancer under the guidance of an organized group composed of representatives from the several medical specialties concerned with the diagnosis and treatment of cancer; a cancer clinical program with conferences and educational programs regularly scheduled on a continuing basis.

Also, an institution-wide cancer registry containing the essential basic information on all patients with a diagnosis, with its information readily available to the medical staff; and reports on analyses of data on survival and end results from the cancer registry presented at least annually to the medical staff.

Approval for three years is given where a program meets the standards or has a minimal number of minor and easily correctable deficiencies. These programs are usually surveyed at intervals of three years by a field survey force of surgeons and registry consultants. This survey force is available for site visits to hospitals which need assistance with an already existing program or desire to start a new program.

Moreover, qualified Fellows of the College in each state serve as consultants to hospital-based cancer programs and coordinate local resources for cancer control.

Provisional approval is given where multiple deficiencies of varying magnitude exist, but where potential and motivation for correction are present. These programs will usually be scheduled for resurvey in one year or as soon thereafter as possible.

The College conducts this project under grant and contract support from the American Cancer Society and the Division of Regional Medical Programs of HEW.

The College's *Manual for Cancer Programs*, published in 1966, describes in detail the requirements of the American College of Surgeons for the approval for cancer programs. The *Manual* may be obtained, free of charge, from the Department of Professional Activities, Cancer, American College of Surgeons, 55 East Erie Street, Chicago, Ill. 60611. Copies of the April issue of the *Bulletin* containing the approved list are also available.

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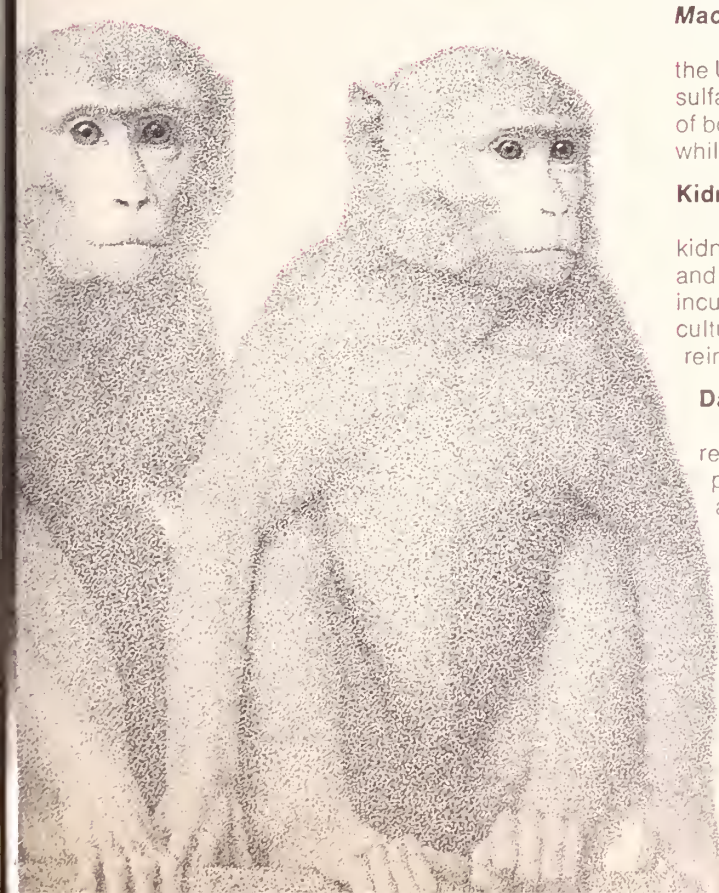
50 mg of sulfamethoxazole/kg of body weight



100 mg of sulfamethoxazole/kg of body weight

Tissue slice technique maps renal distribution in animal studies

Please note that while the method described may add to the knowledge of how antibacterial agents are distributed in the kidney of this animal, no conclusions can be drawn from this study relative to the drug's distribution, effect or use in humans, as it is not possible to extrapolate animal data to humans.



Gantanol® (sulfamethoxazole) administered to *Macaca speciosa* monkeys

Working with *Macaca speciosa* monkeys, researchers at the University of Arkansas Medical Center administered sulfamethoxazole at doses of 12.5 mg, 50 mg and 100 mg/kg of body weight. Each dosage level was given to three animals while three were left untreated as controls.*

Kidneys inoculated with *Staphylococcus aureus*

After 2½ hours, the 12 monkeys were sacrificed and their kidneys frozen with CO_2. Sagittal tissue slices were prepared and placed on blood agar bacteriological plates. They were incubated at 37° C. for 1½ hours. *Staphylococcus aureus* broth culture was then used to inoculate the tissue and slices were reincubated.*

Dark staining reveals heavy bacterial growth

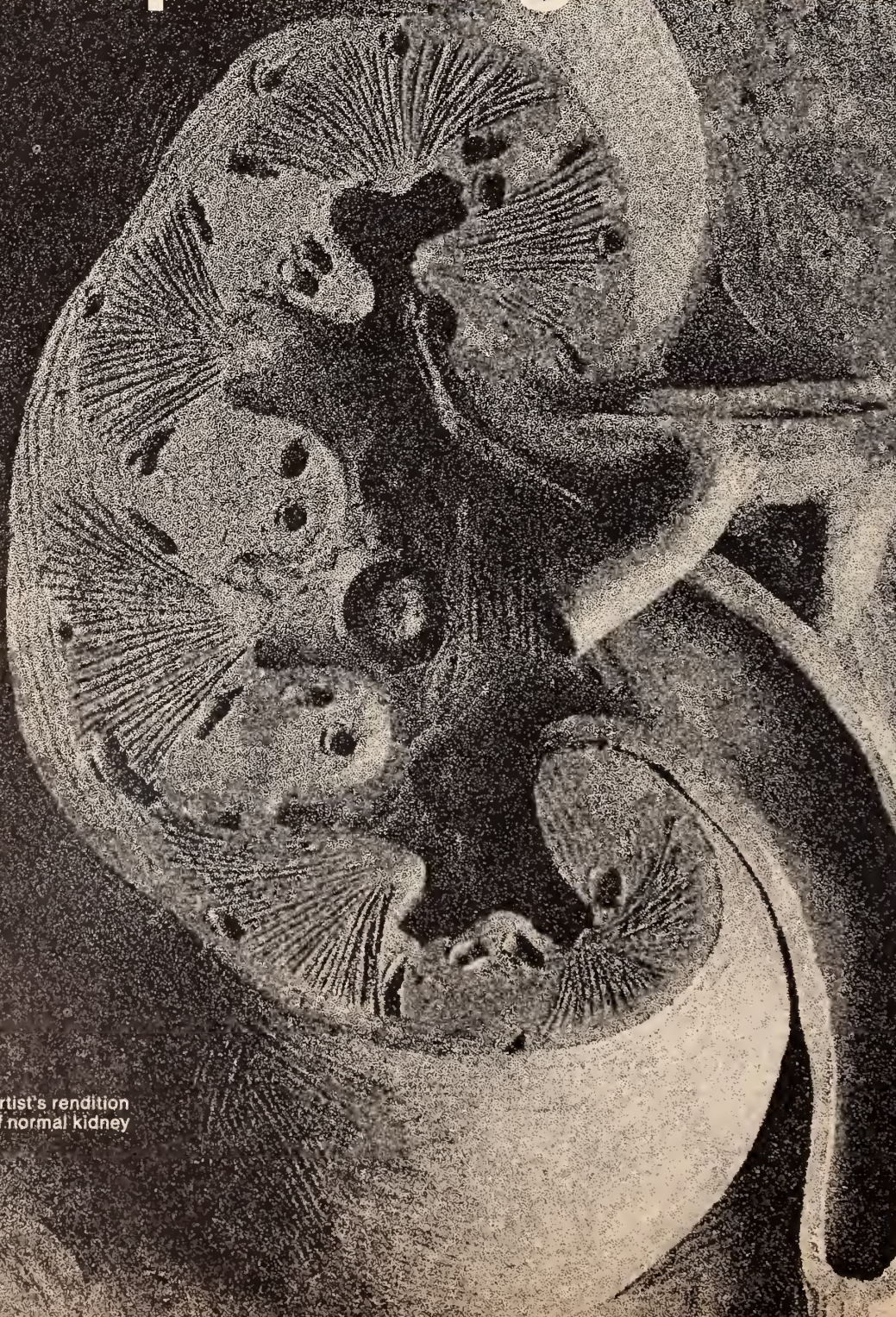
A solution of triphenyltetrazo[illegible] reddish purple in the presence of [illegible] plates after 6 hours. Renal slices from [illegible] animals consistently demonstrated [illegible] growth as evidenced by dark staining.

Distribution throughout *Macaca* renal parenchyma

At the dosage of [illegible] stain pattern indicated [illegible] Renal slices from [illegible] doses showed no staining, indicating inhibition and [illegible] throughout the parenchyma.

*Mobley, J. [illegible] P.: *Surg. Gynec. Obst.* [illegible]

Gantanol® (sulfamethoxazole) in nonobstructed pyelonephritis due to susceptible organisms



Artist's rendition of normal kidney

stablishes antibacterial levels in blood nd urine in from 2 to 3 hours

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ntibacterial Gantanol (sulfamethoxazole) controls susceptible *coli,* the most common cause of urinary tract infections. It is lso effective against other susceptible gram-negative and gram-ositive urinary pathogens such as *Klebsiella-Aerobacter, Staph. ureus* and *Proteus mirabilis.*

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is also common for the elderly and debilitated to develop hronic nonobstructed urinary tract infections, primarily pyelo-ephritis and cystitis. Such cases often respond satisfactorily to erapy with Gantanol.

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ubsequent 1-Gm doses can provide up to 12 hours of antibacte-al activity. The *b.i.d.* dosage is recommended for mild to oderate infections; the *t.i.d.* for the more severe u.t.i. Gantanol rovides coverage around the clock—coverage that is especially mportant during the hours of sleep, when urinary retention vors bacterial proliferation.

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n nonobstructed pyelonephritis lue to susceptible organisms

Gantanol®
(sulfamethoxazole)

Basic therapy

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies.

***Note:* Since *in vitro* sulfonamide sensitivity tests are not always reliable, carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent urinary tract infections.**

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.,* rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis mental depression, convulsions, ataxia, hallucinations tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare cases of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may occur.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage: *Adults*—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) b.i.d. or t.i.d. depending on severity of infection. *Children*—(2 months and older) 50 mg/kg (1 tab or teasp.) for children under 20 lbs. of body weight, followed by 0.25 Gm (½ tab or ¼ teasp.) for each additional 10 lbs. (½ tab or ¼ teasp.) b.i.d. Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets (0.5 Gm scored) and pediatric suspension (0.5 Gm per teaspoonful).

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Pinworm therapy is often a family affair





Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia, malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

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Index to Advertisers

American Medical Association	274B	Pharmaceutical Manufacturers Association	18A, 18B, 18C
Beecham-Massengill Pharmaceuticals	275, 277, 279	Wm. P. Poythress and Co.	250A, 250B
Burroughs Wellcome Co.	8, 246B	Roche Laboratories	second cover, 3, 6, 7, 16, 17, 260, 261, 282A, 282B, 282C, fourth cover
Campbell Soup Company	254A	Julius Schmid, Inc.	10, 11
Eaton Laboratories	12	G. D. Searle Company	254B, 254C, 254D
Geigy Pharmaceuticals	246A	Stuart Pharmaceuticals	258A
Hill Crest Hospital	18	The Upjohn Company	14, 15, 262B, 262C, 262D
Kay Surgical, Inc.	19	Warner Chilcott Labs	262, 262A
Eli Lilly and Company	front cover, 18D	Winthrop Laboratories	258B, 258C, 258D 274
Merck, Sharp and Dohme	270A, 270B, 282D, 283	Woodward Academy	4
Miss. Medical Political Action Committee	19	Thomas Yates and Company	third cover

IN CONCLUSION

The Cost of Living Council exempted from wage-price controls all small businesses except those in the health services and construction fields and those having "master employment contracts." Five million small businesses and 19 million employees are affected by the decision, report the weekly AMA Newsletter. The CLC said it decided not to remove controls on the health services and construction industries because of their continuing, serious inflationary impact.

A Florida Physicians Association, Inc., has been created by the Florida Medical Association to "represent and protect" members in dealings with third parties. Association's House of Delegates also called on FPA to develop program to "preserve professional and economic independence" of members, to advance and protect welfare of patients and physicians in private practice, to assert the "responsibility and right" of physicians to assess and determine their individual roles in the practice of medici

---

Senate Subcommittees on Health and Executive Reorganization each held hearings on S. 3419, Consumer Safety Act of 1972. Bill would establish new Consumer Safety Agency with separate committee commissions of foods and nutrition, drugs and product safety. FDA activities would be transferred to new agency. HEW Secretary testified against bill, stating, "With its improved organization and enhanced resources, FDA is now makin the progress toward effective health and safety protection..."

As a consequence of declining birth rate, community hospitals throughout U.S. have trimmed bassinets in service by 9.4% since 1963, according to AHA journal, Hospitals. Nevertheless, nurseries continue to operate at occupancy level below 44%. Occupancy level last year was 40.3%. In 196 it dipped to 39.9%. The article said a factor in low occupancy rate has been relatively shorter lengths of stay. That has dropped from 4.4 days in 1963 to 4.2 in 1970 and 1971.

Drug development in U.S. is not keeping pace with new products marketed by leading foreign nations, according to testimony presented to Congressional House Health Committee. In England one-third of all drugs now being used were introduced during the last five years as against 10% for U.S. "What is needed," declared Dr. W. Modell, Cornell, "is a complete separation of FDA into a drug agency on the one hand and a transfer of all food regulations into the U.S. Dept. of Agriculture."

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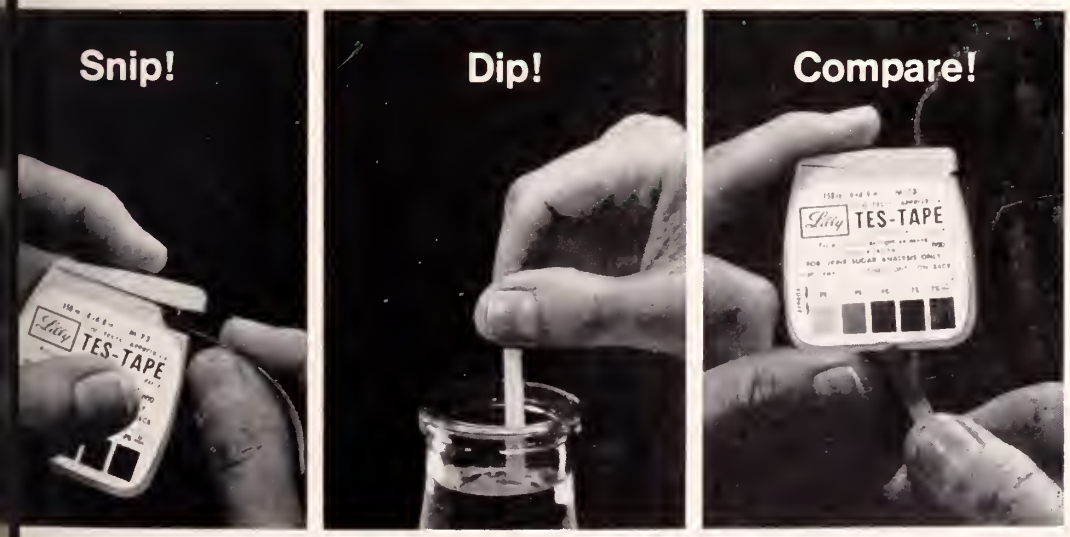
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Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reve ble in most instances by proper dosage adjustment, but are also occasionally o served at the lower dosage ranges. In a few instances syncope has been report Also encountered are isolated instance skin eruptions, edema, minor menstru irregularities, nausea and constipation extrapyramidal symptoms, increased decreased libido—all infrequent and generally controlled with dosage reduc tion; changes in EEG patterns (low-volt fast activity) may appear during and a treatment; blood dyscrasias (includin agranulocytosis), jaundice and hepati dysfunction have been reported occasi ally, making periodic blood counts and liver function tests advisable during pr tracted therapy.
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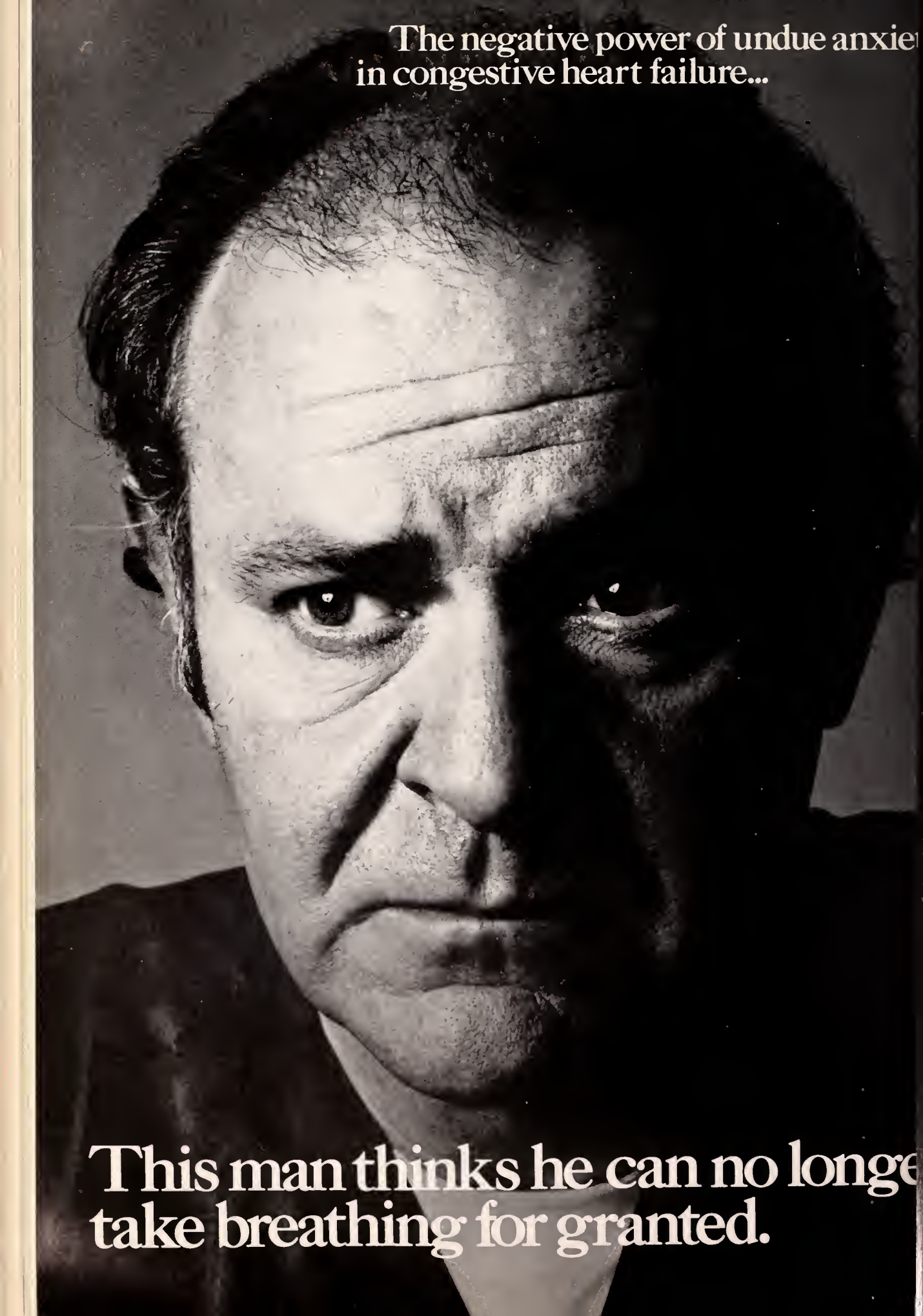
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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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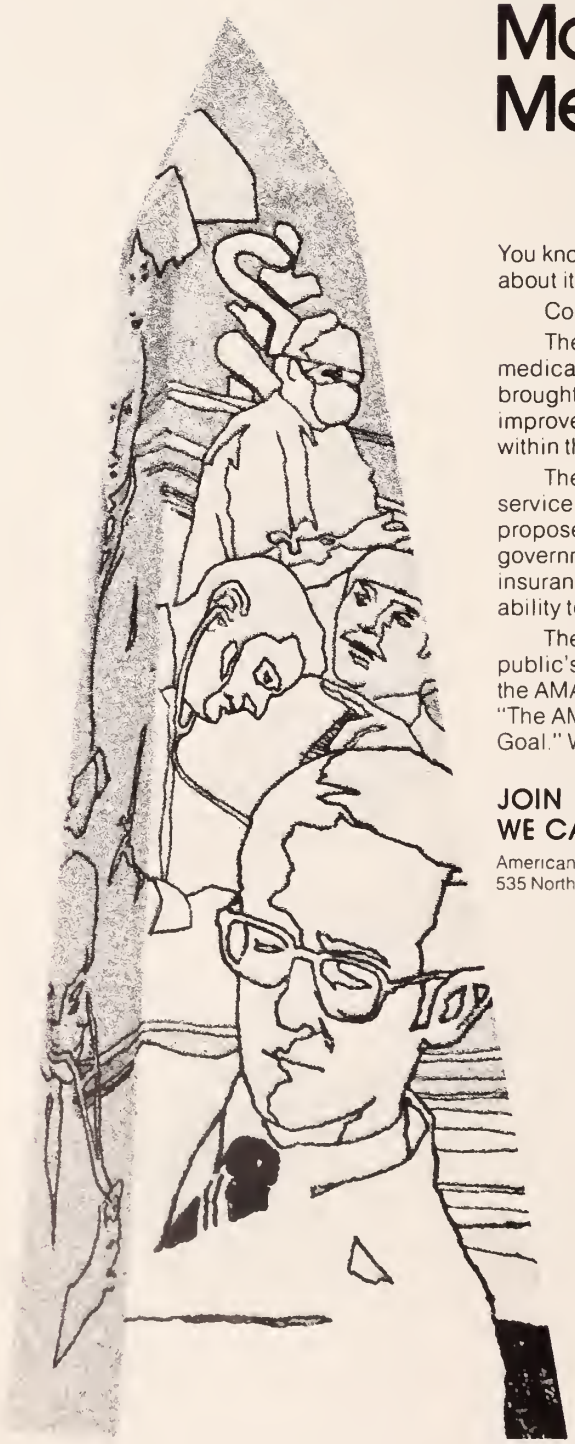
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CONTENTS

ORIGINAL PAPERS

Office Diagnosis of Hyperlipidemia — 285 — KENNETH R. BENNETT, M.D., Jackson, Mississippi

Chronic Active Liver Disease, or Hepatitis — 290 — WILLIAM D. DAVIS, JR. M.D., New Orleans, Louisiana

SPECIAL ARTICLES

Rigors, Risin's and Rheumatism in a Rose Raiser: Disseminated Sporotrichosis — 293 — JOHN D. MORGAN, M.D., McComb, Mississippi

Address of the President — 296 — ARTHUR E. BROWN, M.D., Columbus, Mississippi

Constitution and By-Laws of the Mississippi State Medical Association — 301 — Annual Publication

EDITORIALS

Changes in the Practice of Medicine — 311 — W. MONCURE DABNEY, M.D., Crystal Springs, Mississippi

Family Planning and the Health Department — 312 — VIRGINIA TOLBERT, M.D,. Ruleville, Mississippi

Journalist Discusses Unusual Set of Values — 313 — HOWARD PRESTON, Cleveland, Ohio

THIS MONTH

The President Speaking — 310 — 'Department of Family Practice'

Medical Organization — 319 — St. Dominic-Jackson Memorial Hospital Nears Completion of $17 Million Program

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Pinworm therapy is often a family affair





Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexi nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddine and headache have occurred. Rarely, tinnitus, hyperirritabilit numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis an parenchymal liver damage; hyperglycemia; transient leukope malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

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ude: fever, facial flush, chills, conjunctival injection, edema, anaphylaxis, skin rashes, erythema multiforme uding Stevens-Johnson syndrome), and lymphadenopathy.
plied: Chewable tablets, containing 500 mg thiabendazole, xes of 36, strip packaged, individually foil wrapped; ension, containing 500 mg thiabendazole per 5 cc, in les of 120 cc.

more detailed information, consult your MSD representa- or see the Direction Circular. Merck Sharp & Dohme, sion of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

Prompt relief of pain is a lot of what the practice of medicine is all about... East or West.

In much of the Far East, the analgesic efficacy of Empirin® Compound with Codeine would probably be measured against acupuncture, an ancient and traditional therapeutic system.

In America, codeine sets such a high standard for oral analgesia, that it has become a criterion in terms of which other major oral analgesics are most often measured.

Synthetic and other oral analgesics may offer some of the properties of codeine, but not one can provide both its benefits and potency. And codeine provides an antitussive bonus.



Empirin Compound with Codeine is the most widely used, and probably the most pharmaceutically elegant analgesic preparation providing codeine. It's the time-tested combination for predictable pain relief . . . whether the pain is visceral or musculoskeletal; acute or chronic.

(III) **New prescription flexibility.** At your discretion, and where state law permits, a prescription for Empirin Compound with Codeine may now be refilled up to five times in six months.

Empirin Compound with Codeine No. 3 contains codeine phosphate (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½. Bottles of 100 and 1000.*



But for relief of Western pain

EMPIRIN® COMPOUND C CODEINE

Burroughs Wellcome Co., Research Triangle Park, North Carolina 27709

NEWSLETTER

July 1972

ar Doctor:

ue Cross Association announced reaching major milestone in 1971 by rving more than 100 million persons in North America. Plan paid out cord $13.6 billion in health care benefits through private and gov- nment programs in 1971. Records were established by 74 U.S. plans, in Canada, 1 in Puerto Rico and Jamaica. Association said $.95 of ery $1.00 received by subscribers was paid out in benefits.

Blue Cross subscribers last year accounted for 8.4 million hospital admissions and 11 million outpatient visits. Hospital inpatient rate remained same, but outpatient rate of 165 per 1,000 was 13% higher than 1970. Average length of stay fell for third straight year to 7.1 days.

e U.S. gained 10,795 M.D.s in 1971, amounting to the greatest one-year crease ever attained, according to studies by the AMA Center for Health rvices Research and Development. In 1970, physician population in- eased slightly more than 9,000. There were 344,823 physicians at the d of 1971 in the U.S.

. John Chenault of Decatur, Alabama, president of the AMA-ERF, in- tes physicians and wives to participate in the program for 1972. 71 was a good year, said Dr. Chenault, resulting in 122 U.S. and nadian medical schools receiving grants amounting to $1,108,247. ner funds go to loans for medical students, interns and residents.

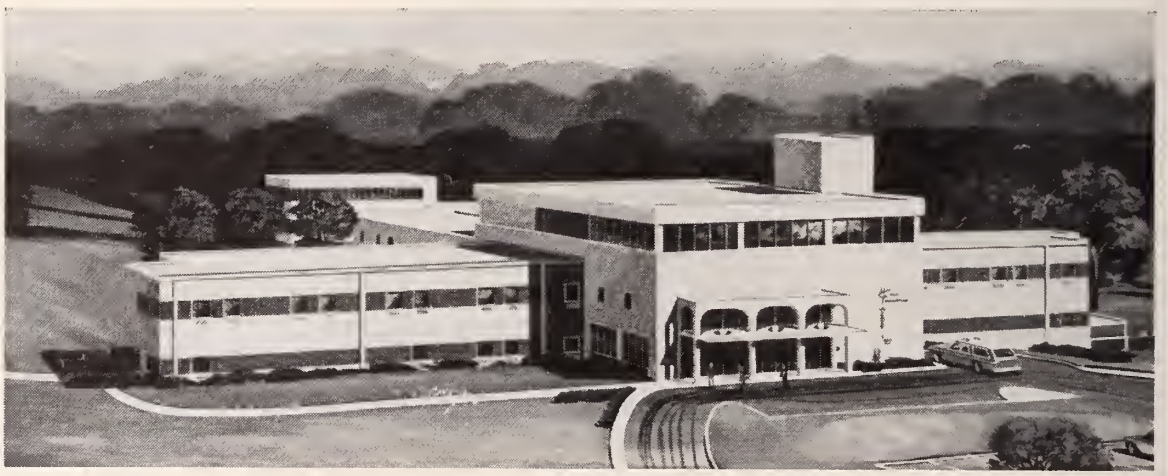
S. will send Russia samples of about 100 cancer viruses discovered d studied during past half century. Decision to share research is rt of health agreement signed by President Nixon and Soviet leaders. ank J. Rauscher, Ph.D., new Director of National Cancer Institute, id there will also be an exchange of cancer research journals.

ngressional hearings on pension reform could bring about major lib- alization of Keogh Law application to self-employed physicians, re- rts American Medical News. Nixon proposal provides that annual limit deductible retirement contributions by self-employed be raised to 500 or 15% of income, whichever is less, from present $2,500 or 10%

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor



HILL CREST HOSPITAL

For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

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Hardin M. Ritchey, M.D.
F. Joseph Nuckols, M.D.
James A. Greene, M.D.
Charles W. Moorefield, M.D.
Otto F. Eisenhardt, M.D.

ADMINISTRATOR:

Robert V. Sanders

HILL CREST HOSPITAL

HILL CREST FOUNDATION, INC.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

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Why send him to the islets of Langerhans?



Since sulfonylureas promote the release of insulin which is lipogenic and helps transport glucose into adipose tissue...

And since many overweight patients already have normal or high levels of endogenous insulin, why not consider DBI-TD?

It lowers blood sugar without stimulating insulin secretion from the pancreas. And this may be important to the dieting diabetic.

In adult-onset, nonketotic diabetics uncontrolled by diet alone...

DBI-TD® Geigy
phenformin HCl

lowers blood sugar without raising blood insulin.

DBI® phenformin HCl
Tablets of 25 mg.
DBI-TD® phenformin HCl
Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoglycemia.

Warnings: Use during pregnancy is to be avoided.

Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be used during the dosage adjustment period, particularly when insulin or a sulfonylurea has been given in combination with phenformin.
Adverse Reactions Principally gastrointestinal [illegible] metallic taste, [illegible] and, less frequently, [illegible] diarrhea. Reduction or [illegible] of these symptoms. In [illegible] vomiting [illegible] immediately [illegible] rare [illegible] have [illegible] as [illegible] folic [illegible] (5) [illegible]

[illegible]

GEIGY Pharmaceuticals
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BECAUSE ALLERGIES ARE A YEAR-ROUND THING.

Lots of noses and allergies don't follow the calendar. That's why it's good to remember Novahistine.
A vasoconstrictor-antihistamine. Its convenient twice-a-day dosage can usually give you all-day, all-night relief year-round from nasal congestion due to allergies.
And it's available only on your prescription for adults and children over 12.

NOVAHISTINE® LP

Prescription

DOW PHARMACEUTICALS



Little Rock VA Treats Drug Abuse

The North Little Rock VA hospital has recently developed a comprehensive treatment program for veterans with drug abuse problems. The program is part of the nationwide Veterans Administration Drug Treatment Network of 32 such units established in September of 1971. The inpatient facility is in operation, and an intensive outpatient program is being developed.

The program will serve veterans from Arkansas and the surrounding states. For services in the Drug Treatment Program, a veteran is defined as a man who has had a period of active duty in the military service, other than for training purposes, and has a drug abuse problem.

Patients can be admitted at anytime during the days of the week by seeing the physician in the Admission Office in Building 37. Admission procedures can be expedited if (1) prospective patients bring proof of military service with them, and (2) seek admission between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday.

The VA Hospital Drug Treatment Program is housed in Building 63. Entry into the program is based on voluntary admission or civil commitment. All agencies counseling with a veteran seeking voluntary treatment for his drug problem should explain the below information to him before referring the individual to this program.

The basic treatment program is of three months duration, plus optional periods of additional time if the veteran desires to continue in treatment, extended vocational planning, etc. All special planning for the veteran, after finishing the basic program, takes place on an individual basis in conference with appropriate staff members.

Essentially, the program is divided into four phases as follows: (1) first week's residence on the Detoxification Area; (2) second week in a candidacy evaluation status; (3) if accepted, then placed in the treatment program for 10 weeks; and (4) discharge and outpatient treatment unless the veteran and staff mutually agree to an extension of program time for special treatment or planning.

The content of the program includes the following rehabilitation services: (a) medically supervised detoxification; (b) attention to personal living problems through the uses of group psychotherapy such as confrontation sessions, Synanon-type meetings, human relations training and psychodrama; (c) individual counseling upon request; (d) family therapy; (e) vocational counseling and job placement; (f) drug education; (g) peer group patient meetings; and (h) outpatient followup on an intensive and extensive basis.

This Drug Treatment Program does not use the Methadone maintenance treatment approach. Methadone is used only during the detoxification withdrawal phase if medically indicated.

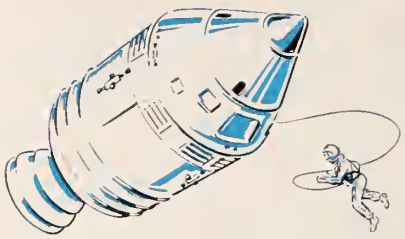
There will be no visitors for the patient's first 37 days in the hospital. When patients are allowed visitors, visiting hours and rules will apply, and it is expected that family and friends strictly observe them.

For further information, write Sydney R. Cooden, M.S.S.W., coordinator of Social Services for Addictions, Veterans Administration, North Little Rock Hospital Division, North Little Rock, Ark. 72114.



"My secret? For heartburn I always use 'Dicarbosil'."

Dicarbosil®
ANTACID
Write for Clinical Samples
ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102



Man in space, naw fait accompli, re-emphasizes the importance of Uro-Phasphate therapy. Research inta the effect af space travel on the astranaut reveals that weightlessness causes loss af bone calcium. As the banes are required ta bear less and less af the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity af the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis ta prevent kidney ar bladder calculi.

Uro-Phosphate

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection af the inactive patient 1 or 2 tablets every 4 ta 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, cantributing to camfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

DATELINE

icago Hospital ashes OB Charges

Chicago, Ill. - Michael Reese Hospital lowered obstetrical department charges to $46 a day from $166 because "we had priced ourselves right out the market," according to hospital spokesman. He said hospital's department's occupancy rate had dropped to 60% in recent months. b and drug charges will add average of $20 a day to the $120 cost obstetrical and delivery rooms. Average stay is 4 days.

A Required Data utters Drug Ads

New York, N.Y. - Due to FDA advertising regulations, prescription drug advertisements do not always communicate balanced, practical prescribing formation, said C. Joseph Stetler, Pharmaceutical Manufacturers Association president in address to N.Y. Pharmaceutical Advertising Club. explained that M.D.s sometimes don't get essential information on ug's side effects because of too much information cluttering ads.

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bstitute Milk No od for Infants

Evanston, Ill. - American Academy of Pediatrics' Committee on Nutrition cautions consumers against substituting filled milks, imitation milks and ffee whiteners for whole milk in infant diets, and urges careful judgnt in use of substitutes in older children's diets. Committee said ere are no regulations governing vitamin and mineral levels in imitaon milks, and many have inadequate levels of most essential nutrients.

---

ntists Criticize O Proposals

Washington, D.C. - American Dental Association criticized HMO proposals as biased toward "one kind of system, the closed panels that now encompass me 4% of the population." In testimony before House Commerce subcomttee, ADA said it saw "much merit in well designed investigations of e potential of HMOs...so long as evenhanded, supportive attention is id to a broad range of models."

---

ncer Mortality tes Changing

New York, N.Y. - During the 60's cancer mortality rates continued to rise among white males at ages 35 and over, showed little change among white fales at these ages, decreased slightly at younger ages in both sexes se among women aged 45 and older. Death rates from cancer of respiry system, pancreas, kidney, and breast have risen while other sites veled off or declined, say studies by Metropolitan Life Insurance Co.

When you prescribed Orinase®

(tolbutamide, Upjohn)

14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures neces for optimal control with insulin are also necessary with Ori The patient on Orinase must be fully instructed: abou nature of his disease; how to prevent and detect complicat how to control his condition; not to neglect dietary restrict develop a careless attitude or disregard instructions relati body weight, exercise, personal hygiene, and avoidance fection; how to recognize and counteract impending hyp cemia; how and when to test for glycosuria and ketonuria; to use insulin; and to report to the physician immediately does not feel as well as usual.

Caution, very close observation, and careful adjustme dose are necessary when: insulin is withdrawn during the period in order to avoid ketosis, acidosis, and coma; thi diuretics are administered which may result in aggravati diabetic state and increased tolbutamide requirement, te rary loss of control, or even secondary failure; treating pat with impaired hepatic and/or renal function and debilitated, nourished, or semistarved patients in order to avoid severe glycemia which may require corrective therapy over se days; and treating patients with severe trauma, infection, or gical procedures where temporary return to insulin or adc of insulin may be necessary. Response to tolbutamide is d ished in patients receiving therapy with beta blocking ag

As some diabetics are not suitable candidates, it is esse that the physician familiarize himself with the indications, of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, during the initial test period should communicate with the p

Today you have your own.

If you're around 40 or 45, you've bably had quite a bit of clinical experience h Orinase.

Maybe as much as 14 years.

And that means you know quite a about it.

On the one hand, you know that diet l weight control are the initial and essential ndations for the management of adult-set, non-ketotic diabetes. When these asures prove satisfactory, no additional rapy is indicated. On the other hand, you w that if these measures fail the addition of Orinase to the regimen can often help lower blood sugar. Orinase lowers blood sugar as effectively today as it did when you first prescribed it.

You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

In short, Orinase is a drug you're familiar with, and probably have confidence in.

And that may be the best recommendation Orinase can have.

Orinase®
0.5 g. tablets
(tolbutamide, Upjohn)

n daily, and during the first month report at least once weekly physical examination and definitive evaluation. After a month, minations are recommended monthly or as indicated. Appearance of ketonuria, increase in glycosuria, unsatisfactory ering or persistent elevation of blood sugar, or failure to ain and hold clinical improvement indicate nonresponsiveness to Orinase (tolbutamide). Orinase does not obviate need for ntaining standard diet regulation. Uncooperative patients uld be considered unsuitable for therapy. Prescriptions should refilled only on specific instruction of physician. In treating d asymptomatic diabetic patients with abnormal glucose erance, glucose tolerance tests should be obtained at three- ix-month intervals. Orinase is not an oral insulin or a substi- for insulin and must not be used as sole therapy in juvenile betes or in diabetes complicated by acidosis or coma where ulin is indispensable.

f phenformin is prescribed in combination with Orinase, appriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, y occur and may mimic acute neurologic disorders such as ebral thrombosis. Certain factors such as hepatic and renal ease, malnutrition, advanced age, alcohol ingestion, and enal and pituitary insufficiency may predispose to hypoglymia and certain drugs such as insulin, phenformin, sulfonades, oxyphenbutazone, salicylates, probenecid, monamine dase inhibitors, phenylbutazone, bishydroxycoumarin, and enyramidol may prolong or enhance the action of Orinase and rease risk of hypoglycemia. Orinase long-term therapy has en reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia, agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

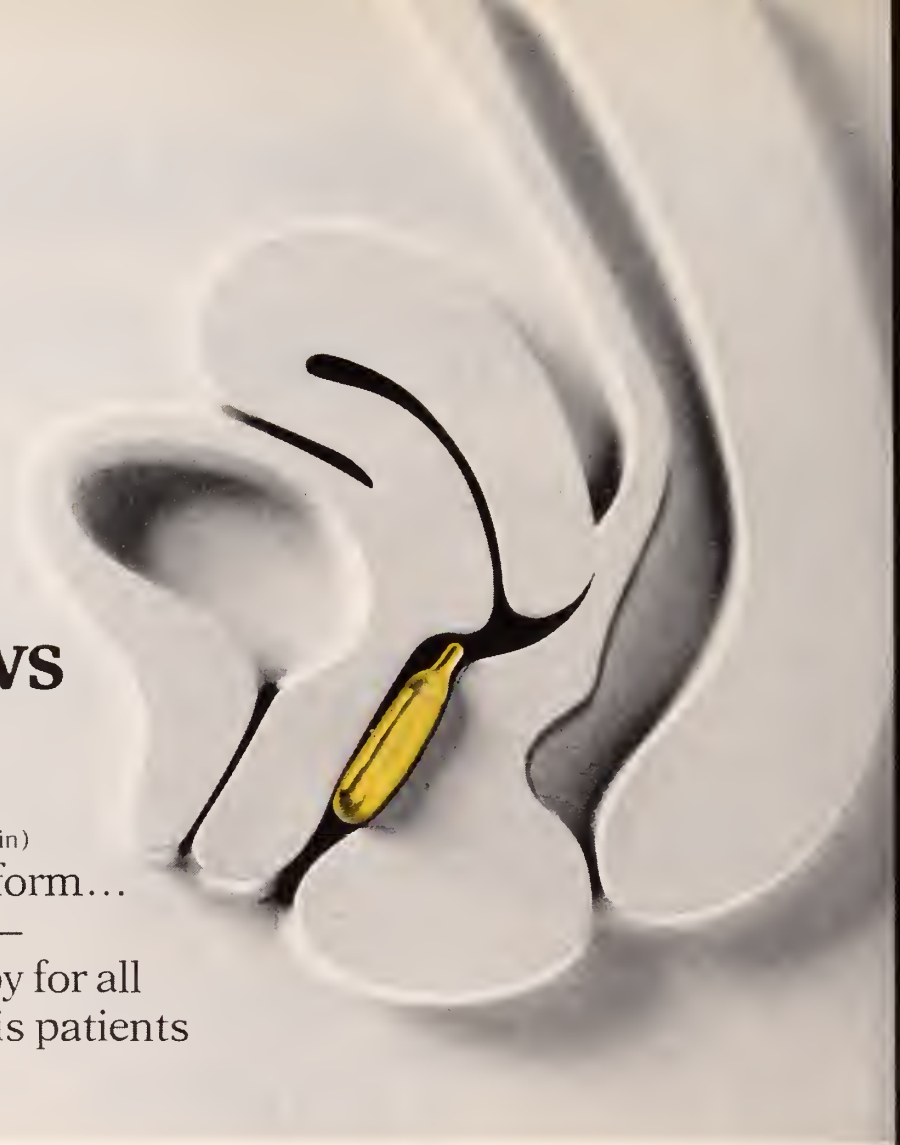
Supplied: *0.5 g. Tablets*—bottles of 50, 100 and 1000, and cartons of 100 in foil strips

For additional product information, see your [illegible] tative or consult the package insert.

The Upjohn Company, Kalamazoo, Michigan [illegible]

Upjohn

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Now form follows function

Only **Candeptin** (candicidin) gives you this unique form... a soft gelatin capsule— highly effective therapy for all your vaginal moniliasis patients

CANDEPTIN® (candicidin) VAGELETTES™ Vaginal Capsules...a unique dosage form... anatomically and therapeutically designed to extend flexibility in the treatment of vaginal moniliasis.

Virtually unlimited application

CANDEPTIN VAGELETTES Vaginal Capsules provide the specific high potency antimonilial agent, candicidin, in a soft gelatin capsule—the shape designed with your patient in mind. It permits easy manual insertion without the need for an applicator or inserter...of particular value for the pregnant patient...for *intravaginal use*. By cutting off the tip of the narrow soft end, the contents can be extruded through an intact hymen for *intravaginal use*. And it is readily adaptable to *topical application* for labial involvement, and/or *intravaginal use* to treat mucosal infection.

CANDEPTIN (candicidin) provides:

Rapid results

Prompt, symptomatic relief—itching, burning, and discharge subside in 48-72 hours[1]
Soothing, miscible ointment permits complete contact with affected tissue.
Usually cures in a single 14-day course of therapy.[2,3,4]

Safe

Exact dosage assured.[2,3]
No side effects, clinical reports of irritation or sensitization extremely rare.

Convenience

Easy to use intravaginally and/or topically for labial involvement.
Encourages patient acceptance and cooperation.
Therapy is easy to start in your office.

Clinical proof of potency

CANDEPTIN (candicidin) is significantly more poten *in vitro* than nystatin.[5] CANDEPTIN Vaginal Ointmen and Tablets have a clinical record of cure rates of 90% and more in pregnant and non-pregnant patients.[1,4,6] In recent studies on CANDEPTIN VAGELETTES Vaginal Capsules, involving both gravi and non-gravid patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Unique CANDEPTIN® (candicidi VAGELETTES™ Vaginal Capsule

Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: 1. Olsen, J. R. Journal-Lancet *85*: 287 (July) 1965. 2. Giorlando, S. W. Ob. Gyn Dig. *13*: 32 (Sept.) 1971. 3. Decker, A. Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S. W., Torres, J. F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. 5. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960, pp. 614-618. 6. Friedel, H. J.: Maryland M. J., *15*:36 (Feb.) 1966

Julius Schmid Pharmaceuticals
423 West 55th Street
New York, New York 10019

CANDEPTIN®
(candicidin)
Vaginal Tablets
Vaginal Ointment
and VAGELETTES™
Vaginal Capsules

AAFP Supports VD Educational Campaign

The American Academy of Family Physicians has announced that it will participate in a national educational campaign to combat venereal disease.

The campaign will be launched this fall with the televising on the nation's 220 Public Broadcasting Service stations of a one-hour program of dramatic vignettes on venereal disease being produced by National Educational Television under a grant from the 3M Company.

At their annual State Officers' Conference, Academy leaders pledged the support of their chapters throughout the nation in planning and participating in the local telecasts. AAFP members will appear on the local telecasts in panels and manning telephone "hotlines" for the viewing audience. In addition they will address educational and civic organizations in their communities and distribute in their offices material providing information on VD.

Contemporary Medicine Surgery Meet Set

The annual meeting of the American Society of Contemporary Medicine and Surgery will be held Feb. 25-Mar. 3, 1973, at the Fontainebleau Hotel, Miami Beach, Fla. All courses are approved for continuing education credit by the Council on Education of the American Medical Association.

The theme of the meeting is Continuing Education for Excellence in Medicine and Surgery. Dr. Michael DeBakey of Houston, the society's president, will give the keynote address. Co-chairmen of the meeting are Dr. Morris Fishbein, author and editor, and Dr. George E. Moore of the Roswell Park Memorial Institute, director of Public Health Research, State of New York Department of Health.

A highlight of the meeting will be the annual Elmer Holmes Bobst Lecture Series on Cancer with papers by leading experts in oncology. Featured on the program will be symposia, lectures and discussions in contemporary surgical procedures in gynecology, dermatology, otolaryngology, orthopaedics, urology and gastroenterology.

For further information write: Miss Virginia Kendall, Secretary, Suite 1629, 30 North Michigan Avenue, Chicago, Ill. 60602.

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Additional information available to the profession on request.

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
July 1972, Vol. XIII, No. 7

ORIGINAL PAPERS

Office Diagnosis of Hyperlipidemia

KENNETH R. BENNETT, M.D.
Jackson, Mississippi

Practical screening of individuals for an abnormality of lipid metabolism can be done by combining a carefully done history and physical examination with the serum cholesterol, visual examination of the fasting plasma and a test of glucose tolerance. In patients suspected of having abnormal lipid metabolism, serum triglyceride and lipoprotein electrophoresis is usually necessary for accurate classification, reports the author.

DESPITE THE LONG HELD notion that a disturbance of lipid metabolism occupies a central or primary role in the development of atherosclerotic vascular disease, clinical application of the knowledge gained from basic research has been hindered by the absence of a systematic and practical classification of lipid abnormalities. Clinicians, combining biochemical, anatomic, and hereditary features of the lipid disorders, spoke for years in broad descriptive terms such as familial xanthomatosis, familial hyperlipemia, idiopathic hypercholesterolemia, etc. While on the other hand, biochemists characterized lipid abnormalities in terms of Svedburg flotation units, the various Cohn fractions, and comparative densities of the lipids as measured with centrifugation.

Toward the latter part of the first half of this century, biochemists and clinicians combined their talents and began to classify lipid disorders as those of exogenous origin (lipid elevations of the blood derived from ingested fat and responding to curtailment of fat in the diet) or those of endogenous origin (lipid elevations derived from body metabolism of carbohydrates and storage fats that responded to limitation of carbohydrate in the diet).

Although this classification was quite helpful, it was not until the classic paper by Fredrickson, Levy, and Lees[1] was order brought to a previously chaotic system of classification. They introduced a clinical and biochemical classification of the lipid abnormalities based on the paper electrophoretic pattern of the plasma lipoproteins. Because lipids are insoluble in water and blood is an aqueous solvent, some method of solubilization of the lipids in this media is necessary. Lipid-protein complexes referred to as lipoproteins serve this purpose in that the combination of the water insoluble lipid with the water soluble protein renders a complex sufficiently soluble to circulate freely without producing a lipid water interface. The lipoproteins are composed of varying amounts of lipids (glycerides, cholesterol, phospholipid, free fatty acids) and carrier proteins.

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The carrier proteins are called apoproteins and are named according to their migration on a routine protein electrophoretic strip. Lipoprotein electrophoresis is similar to the well known protein electrophoresis except that it is the lipid portion of the lipoprotein complex that is stained rather than the carrier protein.

Five types of lipoproteins have been found in human serum, these being chylomicrons derived from ingested fat, beta-lipoproteins, pre-beta-lipoproteins, alpha-lipoproteins and albumin-bound free fatty acids. In the fasting state, only beta and alpha lipoproteins are found in normal human serum. Any deviation from this pattern is abnormal and is called *hyperlipoproteinemia* when there is an increase in one or more of the lipoproteins and *hypolipoproteinemia* when there is a decrease in one or more of the lipoproteins.

Hyperlipidemia refers to an elevation of one or more of the blood lipids (cholesterol, glycerides, phospholipids) and by inference means an increase in the lipid-protein complex (hyperlipoproteinemia). The term *hyperlipemia* refers to the creaminess or turbidity of serum or plasma as a result of an increased concentration of triglyceride-rich chylomicrons derived from ingested fat or triglyceride-rich pre-beta-lipoproteins derived from endogenous production by the liver.

DIAGNOSIS

Tables 1 and 2 summarize the clinical and biochemical features of the primary hyperlipidemias according to Fredrickson's classification. The five basic types are often referred to simply as Fredrickson's type I, II, III, etc. or else the particular lipoprotein staining pattern is stressed such as hyperchylomicronemia (type I), hyper-beta-lipoproteinemia (type II), etc. From the standpoint of understanding the various disorders reference to the particular lipoprotein staining pattern is more satisfactory. Almost all adults with abnormal lipid patterns fall into one of three groups (types II, III, IV). These three types are all associated with accelerated cardiovascular disease.[2] It should be pointed out that the association of vascular disease is with the primary familial form of these disorders and not the secondary type with the exception of the secondary forms of type IV due to diabetes mellitus and perhaps oral contraceptive agents.[3]

Types II, III, and IV for practical purposes are the only types seen with any frequency and diagnostic efforts to uncover them do not require an elaborate laboratory evaluation (see Table 3). Type IV is the most frequent and the majority of individuals with this abnormality tend to be overweight and mildly diabetic. They have an elevation of the plasma triglyceride level and the serum cholesterol may be normal or only slightly elevated. Type II individuals show only an elevation of the serum cholesterol and characteristically have cholesterol deposits in the cornea, eye lids, and frequently in the tendons. A normal fasting serum cholesterol essentially eliminates the consideration of this abnormality. Type III is relatively uncommon and shares clinical and biochemical features common to types II and IV. Individuals with type III are particularly prone to develop accelerated peripheral vascular disease.

It is obviously impractical and at the present time quite expensive to obtain an exhaustive lipid evaluation in every patient. Depth of investigation should be based on the presence or absence of those features gained from a careful history and physical examination with particular reference to individual or familial features suggestive of an abnormal lipid state (see Table 4). In screening for lipid disorders in patients in whom there is no reason to suspect a disturbance of lipid metabolism the following should suffice and if these tests are normal it is unlikely that an abnormality of lipid metabolism exists:

(1) a determination of serum cholesterol,[4] (2) inspection of the fasting serum or plasma, and (3) a test of glucose tolerance (at minimum a two hour post prandial blood sugar).

If features suggestive of a lipid disturbance are present, then determination of the triglycerides

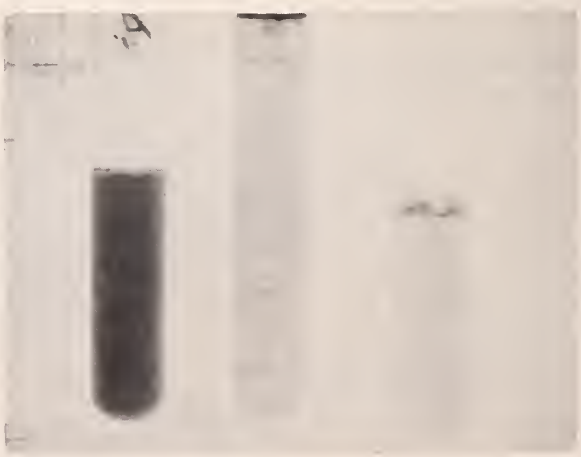


Figure 1. Fasting samples of plasma showing the normal clear appearance (center) from a normal individual and slight turbidity (right) from a patient with slight elevation of the triglycerides. The tube on the left is from a patient with a triglyceride level of 2,000 mg per cent (normal—less than 150 mg per cent).

TABLE 1

CLASSIFICATION OF PRIMARY HYPERLIPIDEMIAS (CLINICAL FEATURES)

Type	*Old Name(s)*	*New Name(s)*	*Usual Age Detected*	*Clinical Picture*	*Glucose Tolerance*	*Secondary Causes*
I Rare	Essential hyperlipemia Familial lipemia Idiopathic hyperlipemia Hepatosplenomegalic lipidosis	Fat induced (exogenous) hyperlipemia Hyperchylomicronemia	Infancy	Colic Cream of tomato soup appearance of blood Hepatosplenomegaly	Normal	Dysglobulinemias
II Common	Familial xanthomatosis Essential hyper-cholesterolemia Xanthoma tuberosum Xanthoma tendinosum	Hyper-beta lipoproteinemia	Adolescence and adulthood	Corneal arcus Xanthelasma Tuberous and tendinous xanthomas **Accelerated vascular disease*	Normal	Hypothyroidism Obstructive biliary disease Nephrotic syndrome Macroglobulinemia Myeloma
III Uncommon	Hereditary xanthoma tuberosum multiplex Mixed familial hypercholesterolemia and hyperlipemia	Broad beta lipoproteinemia	Adulthood	Eruptive xanthomas especially palmar Corneal arcus Diabetes mellitus Hyperuricemia **Accelerated vascular disease*	Usually abnormal	Obstructive biliary disease Dysglobulinemias Diabetes mellitus
IV Most Common		Carbohydrate induced (endogenous) hyperlipemia Pre-beta hyperlipoproteinemia	Adulthood	Mild Diabetes Hyperuricemia Eruptive xanthomas Hepatosplenomegaly **Accelerated vascular disease*	Usually abnormal	Diabetes mellitus Hypothyroidism Alcoholism Pancreatitis Nephrotic syndrome Pregnancy Oral contraceptives Gout Myeloma Glycogen storage disease
V Rare	Essential hyperlipemia	Mixed hyperlipoproteinemia (exogenous and endogenous)	Adulthood	Recurring abdominal pain Eruptive xanthomas Hepatosplenomegaly	Often abnormal	Pancreatitis Alcoholism Uncontrolled diabetes mellitus

should be performed in addition to the above basic tests. Because elevation of the triglyceride fraction gives a turbid or creamy appearance to plasma or serum, the appearance of the patient's serum or plasma after an overnight fast (12-14 hours) has practical application (see Figure 1). The presence of a clear serum or plasma essentially rules out a type IV or III abnormality since a significant elevation of triglyceride is unlikely, although a slight elevation could be present and not be appreciated by the observer.

In all persons in whom investigations are being undertaken it is important that the patient be on his or her ad lib diet for a period of two weeks prior to study. The blood should be collected after an overnight fast of 12 to 14 hours and a few milliliters should be set aside and refrigerated overnight for inspection of the serum or plasma the following day. Since alcohol prolongs the post-absorptive hyperchylomicronemia, the patient should avoid alcohol for at least 24-48 hours prior to the test.

The plasma appearance should also be interpreted with caution in patients receiving heparin. Heparin liberates or activates the enzyme lipoprotein lipase which facilitates the clearing of triglycerides from the blood. In individuals receiving heparin the plasma or serum might appear "clear" when otherwise it would show a cloudy or turbid appearance, characteristic of the elevation of triglycerides. If the patient shows an elevation of cholesterol and a clear serum then a primary or secondary type II abnormality is most likely. Likewise, if a patient shows a normal or elevated cholesterol with turbidity of the serum, then a type IV or III abnormality is likely. At this point triglyceride determination would be indicated and lipoprotein electrophoresis would be indicated for accurate typing. Harlan has devised a nomogram employing fasting cholesterol and triglyceride levels in differentiating the five lipoprotein patterns

TABLE 2

CLASSIFICATION OF PRIMARY HYPERLIPIDEMIAS (BIOCHEMICAL FEATURES)

Type	*Lipoprotein*	*Plasma Appearance*	*Triglycerides*	*Cholesterol*	*Proposed Mechanism(s)*	*Carbohydrate Sensitive*	*Fat Sensitive*
I	Chylomicra elevated	Creamy over clean infranate	Elevated	Normal	Decreased lipoprotein lipase activity	No	Yes
II	Beta lipoproteins elevated	Clear	Normal or slightly elevated	Elevated	Unknown increased beta protein production decreased beta protein destruction	No	Yes (cholesterol)
III	Abnormal broad beta protein present	Turbid	Elevated	Elevated	Abnormal protein (decreased removal)	Yes	No
IV	Pre-beta-lipoproteins elevated	Turbid	Elevated	Normal or slightly elevated	Excess hepatic glyceride release Decreased glyceride removal Abnormal lipoprotein (dysglobulinemia) Increased mobilization of free fatty acids?	Yes	No
V	Chylomicra, beta and pre-beta lipoproteins elevated	Creamy over turbid infranate	Elevated	Elevated	Combination I and IV	Yes	Yes

TABLE 3

RELATIVE FREQUENCY OF LIPOPROTEIN PATTERNS IN 135 PATIENTS WITH HYPERLIPIDEMIA STUDIED AT UNIVERSITY OF MISSISSIPPI MEDICAL CENTER, 1969-1970

	Number of Patients	*Relative Frequency* PER CENT
Type I	0	0
Type II	51	38
Type III	21	16
Type IV	61	45
Type V	2	1
	135	100

TABLE 4

CLINICAL CLUES TO ABNORMALITY OF LIPID METABOLISM

Patient or family history of
early vascular disease
abnormal glucose tolerance
gout or elevated uric acid
corneal arcus
xanthelasma and xanthomata
unexplained episodic abdominal pain

which can serve as a useful guide in managing these patients until more accurate electrophoretic typing can be obtained.[5]

If an abnormality is found by demonstrating an elevated cholesterol and/or turbidity in the fasting plasma or serum, then secondary causes of these patterns should be considered (see Table 1). For instance, every patient with an elevated serum cholesterol and a clear plasma sample does *not* have *primary* type II hyperlipoproteinemia. A very common cause for this lipid pattern is hypothyroidism and like other secondary forms, correction of the underlying metabolic disorder results in the correction of the abnormal lipid pattern.

As a final note it is well worth remembering that although we may categorize lipid disturbances and manipulate the various lipids in those directions that seem appropriate, there is still no clear indication that the vascular disease will be lessened. However, regardless of the role lipids play in the pathogenesis of vascular disease, modern clinical management of these disorders requires a good look at the patient's lipid metabolism. At present the cost of an elaborate lipid survey appears unjustified in all patients, but screening is quite within the range of most patients through their physician's office and local laboratory. ★★★

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EYE-STOPPER

Sign in a school zone: "Drive carefully. Don't hurt our little tax deductions."

Chronic Active Liver Disease, or Hepatitis

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The author gives the classification of chronic active liver disease, or hepatitis, as defined by the International Committee of the European Association for the Study of Liver Disease. He then discusses in detail the etiology and treatment and relates his experiences with 33 patients with hepatitis followed for from 1 to 16 years.

THE LACK OF a specifically identifiable etiologic agent as a cause of chronic active liver disease has fathered a descriptive approach to the clinical course, histopathologic abnormalities, and ultimate destiny of this condition.

The International Committee of the European Association for the study of Liver Disease[1] has classified the histopathologic changes in this condition as (1) *chronic, persistent hepatitis,* characterized by a limited chronic inflammatory response chiefly in the portal spaces, little disturbance of the lobular architecture, little or no fibrosis, and continuing integrity of the limiting plate between the parenchyma and the portal space; and (2) *chronic aggressive hepatitis* with a much more prominent chronic inflammatory response involving the lobules as well as the portal tracts, stromal collapse, and disruption of the limiting plate. Intralobular septa are formed with disturbance of the lobular architecture but no nodular regeneration.

Although the first category is usually associated with the benign course and the second with a more severe degree of morbidity and mortality, this is not universally true. Cirrhosis may follow the second category but rarely does the first. However, there is increasing awareness of migration of patients from one category to another as the course of the illness unfolds. Active chronic hepatitis or lupoid hepatitis microscopically is simply a severe chronic aggressive hepatitis but is associated with the clinical manifestations of skin rash and pleural, pulmonary, cardiac, colon, joint, renal, and thyroid inflammatory processes. Hemolytic anemia, positive lupus erythematosus preparations, positive anti-nuclear factors, and more recently a rather strong tendency for positive smooth muscle antibodies have also been found.

Baggenstoss and co-workers[2] have expanded the classification by adding categories of subacute hepatitis with bridging, subacute hepatitis with multilobular necrosis, and cirrhosis. It was their observation that subacute hepatitis with bridging or multilobular necrosis was more likely to be fatal. They also observed a change from one category to another, usually a less severe one, in association with corticoid or immunosuppressive therapy.

Clinical and laboratory manifestations in these categories frequently are in accord with the microscopic findings but not invariably. In chronic, persistent hepatitis, there is relatively little systemic reflection. The liver may be slightly enlarged; the spleen is usually not palpable. Laboratory studies exhibit modest abnormalities in the transaminase values. Hyperbilirubinemia is minimal and bromsulphalein retention is of the order

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of 10 to 20 per cent. Serum proteins are little altered. In chronic aggressive hepatitis, more definite stigmata of liver disease such as liver palms or small spiders may be found. The liver is somewhat larger, may be quite firm, and is frequently nontender, though tenderness may be an important manifestation. The spleen may be palpated. There is usually mild to moderate jaundice. Transaminase elevations and bromsulphalein retention tend to range higher. Globulin elevation is routine. Mild fatigue and lassitude may be experienced. There is, however, frequently no particular clinical correlation with the microscopic findings of posthepatic cirrhosis, subacute hepatitis with bridging, or subacute hepatitis with multilobular necrosis though development of ascites may occur.

ETIOLOGY

Although the specific etiology of this condition is unknown, there is strong evidence that a virus may be implicated in from 25 to 50 per cent of instances. Numbers of studies are now revealing positive hepatitis-associated antigen tests in these patients.[3, 4] It is interesting that in the more serious cases, the level of hepatitis-associated antigen is lower than in mild conditions. Additional etiologic factors,[5] include drugs, toxins such as aflatoxin and carbon tetrachloride, dietary insufficiency, and circulatory disturbance in the liver. The hepatic mesenchyma may be activated as a result of the initial toxic insult with continued liver cell damage resulting from the active mesenchyma. Many immunologic phenomena are present in these patients and it is attractive to consider that circulating antibodies, active against hepatic antigens, or a cytotoxic antigen-antibody combination originating elsewhere may result in hepatic damage. However, none of these have been demonstrated to be operative in the patient with chronic, active liver disease as yet.

TREATMENT

Elucidation of a useful mode of treatment of these patients has suffered from empiricism in the past, and only recently have controlled prospective double blind studies concerning the effectiveness of immunosuppressive and corticosteroid therapy become available. In many of the milder cases supportive therapy, including nutritious diet, avoidance of fatigue, perhaps brewer's yeast and vitamin supplements, may be all that is necessary. The patients frequently gradually improve and spontaneously go into a state of remission or resolution. A significant number of patients, however, will either gradually get worse or remain ill with ongoing evidence of hepatic cellular destruction. In such instances, McKay of Australia has been so convinced that corticoid therapy was of benefit that he felt use of a prospective double blind study would deny patients useful medication. However, recently, two studies of the prospective double blind type have become available. The first was from Dr. Sherlock's group at the Royal Free Hospital.[4] In this study only 3 of 22 patients treated with corticoid drugs died during the observation period, whereas 17 of 27 in the control group died. Likewise, serum albumin levels were much better in the treated group.

Amon and co-workers[6] from the Mayo Clinic have reported definite improvement in those patients managed with prednisone and azathioprine as opposed to those managed with azathioprine alone or with azathioprine and placebo (see Table 1). Upon withdrawal of treatment, there was a rather high percentage of relapse, 10 of 21 patients, but all who relapsed did so in the first six months after withdrawal of treatment. The Mayo group and the Cleveland Clinic[7] group agree that a combination of small doses of azathioprine with lower doses of prednisone is preferable to larger doses of prednisone, though as yet the statistical results do not show a significant difference.

TABLE 1

CHRONIC ACTIVE LIVER DISEASE
RESULTS OF TREATMENT
MAYO CLINIC*—75 PATIENTS

Treatment	*No.*	*Remission*	*Relapse (6 mo.)*
Prednisone pred. and azp.	51	20	10/21
Azathioprine placebo	24	6	

* Amon, et al.[6]

Our own experience (see Table 2), although not a double blind study, reflects the benefit of corticoid treatment, although a considerable group of patients did improve on simple supportive therapy. The progress of 33 patients with hepatitis has been followed for from 1 to 16 years. Twenty-three received corticoid therapy. Of these, seven are well and off drugs; nine are stable on treatment; two have presently active disease; and five are dead. In the group treated with supportive care only, nine are well; one has active disease; and there were no deaths, which is explained by the fact that those patients who did not

do well on simple support were additionally treated with corticoid drugs.

Individual cases from our experience illustrate the variety of clinical courses which these patients may exhibit. The most satisfactory, of course, is improvement on simple support with complete remission and inactivity of the disease over a long period of time. Other patients will respond satisfactorily to an initial course of corticosteroid drugs, usually prednisone, and after gradual withdrawal will remain well. A distressing number, however, will relapse on withdrawal of corticoid drugs and will require maintenance dosages for a long period of time. In this group we have felt that immunosuppressive agents, azathioprine or cyclophosphamide, have been of benefit in achieving and establishing remission.

TABLE 2

CHRONIC HEPATITIS
RESULTS IN 33 PATIENTS
1-16 YEAR FOLLOWUP
OCHSNER CLINIC

Corticoids	*Well (No Drugs)*	*Stable on Rx*	*Active Disease*	*Dead*
Yes	7	9	2	5
No	9	—	1	0

Unfortunately, some of the patients, despite all therapeutic modalities, will either pursue a steadily declining course, or one of intermittent remission and activation until death in from 6 months to 10 to 20 years. Occasionally these patients will develop such severe liver disease that the complications of portal hypertension, especially varices and bleeding, will require surgical intervention.

Our own method of approach to these patients is to follow their progress carefully and, in the absence of evidence of severe liver damage or rapid progression, continue a simple supportive regimen for two to three months. If there is improvement, this treatment is continued; however, if there is no improvement or evidence of deterioration occurs, biopsy is indicated and in most instances prednisone in dosage of 40 to 60 mg each morning is begun. If laboratory and symptomatic response is good, the dose is slowly and gradually reduced to a level of approximately 5 to 10 mg per day, frequently given on alternate days. Several months after stabilization of the liver tests and clinical findings, the drug may be discontinued. If stabilization does not occur, or if there is prompt relapse, then the use of cyclophosphamide or azathioprine is considered. Although many of the patients do not respond as well as we would like, still many do and there is no reason for an attitude of unrelieved pessimism in approaching the management of these cases. ★★★

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TRUTH OF THE MATTER

Notice how the drug stores always put up those signs: "Fresh stock of candy for Mother's Day!" That means somebody has spent the whole week tearing off Christmas wrappers and gluing on carnations.

Rigors, Risin's and Rheumatism in a Rose Raiser: Disseminated Sporotrichosis

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Sporotrichosis is a rarely encountered but potentially fatal infection with a predilection for gardeners. Repeated cultures of the lesions may be necessary to isolate the fungus. The importance of Amphotericin B therapy, rather than SSKI in treating the disseminated form is emphasized in this case report.

When Mississippi physicians treat impetigo in farmers, produce handlers, or gardeners, they should be aware of the possibility of sporotrichosis as the following case report indicates.

CASE REPORT

This 54-year-old disabled silica plant worker, a rose raiser for 20 years, received some yucca plants wrapped in spagnum moss from Michigan around August of 1968. About Labor Day he had a two day period of chills and fever followed by a breaking out of lumps all over his body. These lumps, at first non-tender, later became quite sore and tender; some of them became pustular and appeared impetiginous. Early in the course of his disease he had a cellulitis-like picture of the left leg and a peculiar rash, treated with tetracycline without response. He was seen six times between Sept. 9, 1968 and Oct. 31, 1968 before a diagnosis of sporotrichosis was made, even though multiple cultures for routine and fungus were taken. Finally a skin lesion on his thigh did grow out Sporotrichum schenckii. By that time he also had joint involvement.

After sporotrichosis was isolated he was admitted to University Hospital for Amphotericin B treatment because iodine treatment was thought not adequate for articular involvement. Examination disclosed the usual changes of advanced emphysema with superimposed silicosis. He had multiple boils and scaly lesions over his body, with several slightly tender subcutaneous lumps about .5 cm in size. Some of these lumps followed lymphatic distribution but there was no enlargement of lymph nodes and no lymphangitis. There was enlargement and slight tenderness with purplish discoloration of (1) the proximal interphalangeal joint of the right fifth finger, (2) the proximal interphalangeal joint of the right middle finger, and (3) the distal interphalangeal joint of the left fifth finger.

Multiple hand x-rays demonstrated lytic lesions in the area of involvement of the joints of the hands with sporotrichosis, but no other abnormalities. Later material was aspirated from the right elbow which grew out sporotrichosis. A bone marrow aspiration was normal and the bone marrow culture for fungus was negative.

The patient was begun on Amphotericin B treatment with 5 mg per day at the beginning, with increments of 5 mg per day until a dose of 30 mg per day was reached. He suffered no complications other than thrombophlebitis where the infusion was given. After tolerating initiation of treatment he was given further treatment as an outpatient, 25 mg of Amphotericin B twice a week, with careful observation of liver function and serum potassium.

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He received a total of 505 mg of Amphotericin B, with the last dose on Feb. 13, 1969. After discontinuing Amphotericin B he was started on as large a dose of SSKI as he could tolerate when all the articular lesions had stabilized. He had residual deformities in the area of joint involvement but the skin lesions healed with residual scarring.

DISCUSSION

Sporotrichosis is an exogenous systemic fungal disease with protean manifestations depending on the particular organ system involved. It may take the form of cutaneous lymphatic distribution with the earliest lesion being a pustulo-papular nodule of the skin appearing characteristically on a finger and at a site where the patient may recall an earlier scratch or prick. The nodule enlarges, becomes red or violet, and is followed by a chain of subcutaneous nodules representing secondary regional lymphatic spread. These may later ulcerate and drain a gray or yellow pus. Regional lymph node enlargement and lymphangitis are unusual.

However, disseminated disease may occur and it may appear as a secondary development from cutaneous lymphatic lesions by direct extension or it may appear without recognized skin involvement previously. Organs of involvement include the bones and joints,[1] the lungs,[2] gastrointestinal tract,[3] central nervous system,[4] and eyes.[5]

The causative organism is Sporotrichum schenckii, a dimorphic fungus not often observed in tissues, but it has a characteristic growth on Sabouraud glucose media at room temperature where a white cottony nonaerial mycelium appears that in three to seven days becomes wrinkled and changes in color from cream to black. Under the microscope, branching septate hyphae are seen, two microns in width, bearing directly or on lateral branches ovoid to spherical bodies (conidia) measuring 2 to 4 by 2 to 6 microns in diameter.

Mice are susceptible to experimental infection and in mouse tissues or on enriched media at 37 degrees Centigrade, round cigar-shaped yeast-like forms are seen that stain gram positive. Agglutination and complement fixation tests[6] have been used in substantiating the diagnosis of sporotrichosis because of the difficulty in proving it by culture and biopsy.

Even though S. schenckii grows in concentrations of iodide well above those obtainable in human subjects on treatment, SSKI is a time honored and effective remedy for sporotrichosis of the skin.[7] However, in disseminated sporotrichosis involving the lungs or bones, Amphotericin B treatment is indicated.

Skin lesions may remain indolent and chronic for many years without progression, however, dis-



Figure 1. Close-up x-ray view of patient's right fifth metacarpal three months after the onset of sporotrichosis, before treatment, showing lytic lesions.



Figure 2. Oil immersion field (1,000 × 12) of a culture of sporotrichum schenckii showing the characteristic gram positive cigar shaped conidia.

seminated sporotrichosis may progress and prove fatal unless treated adequately.

The coincident occurrence of rigors, risin's and rheumatism in a rose raiser in the particular instance is a classical presentation of the disseminated form of sporotrichosis. Particularly noteworthy is the fact that the infection here was not proved until multiple culture attempts were made even though the physician suspected sporotrichosis. ★★★

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CARRYING THINGS TO EXTREMES

We have a friend who's listened to TV so much, he's obsessed with the idea of not offending. Every morning he takes a shower with hexachlorophine soap, washes his hair with dandruff remover, brushes his teeth with a breath-sweetening toothpaste, gargles with a germicide, dusts foot powder between his toes, squirts spray deodorant over his cream deodorant. This man has never offended. How can he? He never gets out of the bathroom!

Address of the President

ARTHUR E. BROWN, M.D.
Columbus, Mississippi

IN PREPARING my presidential address for this, the 104th Annual Session of the Mississippi State Medical Association, it occurred to me to go back five years and reread the presidential addresses of the five men who preceded me in this office. The purpose of this was to see what changes had occurred—to see what problems that were present in those previous years had been solved and then to see what new problems are facing us now.

Surprisingly, the basic changes have been very few. In each speech various programs, plans and ideas were advanced, but the basic problems calling for solutions were: "how best to develop and deliver quality medical care" and "who pays for it." We all know these are still top priorities. Now this does not mean that we have not made progress.

As these facts are considered, it means that we have done a better job than most people realize in that our private system of practice is still very much in operation and the majority of people seem to prefer it. Yet, I believe most of us thought five years ago that we would not be in as favorable a position at this time. It was thought that Medicare and other governmental programs, when started, would completely engulf us. To the everlasting credit of our association, we did our best to meet the challenge and to continue our regular and usual patient care.

This cooperative effort throughout the country may have helped to slow up the expanding medical care programs. This allowed time to evaluate the plans that had been started, and it seems that even some of the liberal bureaucrats are admitting that the programs were poorly organized, were too costly, and were not doing the job for which they were created.

National involvement is necessary if physicians are to have a voice in medicine's future, points out the 1971-72 president of the association. He stresses the role of AMPAC as a means of uniting physicians politically. The medical care foundation and the association's EMCRO (peer review) project were also discussed.

The cost is becoming prohibitive and as usual, the blame is being shifted to the medical profession.

Our first step to meet these problems was started two years ago with the formation of our Committee on Peer Review. In 1970, Dr. James L. Royals, our president, recommended that from within our own ranks, we must develop a working system of peer review as an effective instrument of self-regulation. Failing in this, we would be forced to submit to third parties who would sit in judgment upon the quality of care and the price paid for it. This peer review committee was formed two years ago and has been very active, meeting regularly each month. Their research and study set the stage for the formation of our EMCRO program—Experimental Medical Care Review Organization.

Because we had the personnel, the computerized equipment, and a thorough knowledge of the purpose of this program, we were able to compete against about 20 other states and obtain full funding for a two-year pilot program from HEW. We

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President, Mississippi State Medical Association, 1971-1972.

Read before the House of Delegates, 104th Annual Session, Biloxi, May 8, 1972.

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Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture. The oral form is indicated also for intestinal amebiasis and amebic liver abscess.

Contraindications: Evidence or history of blood dyscrasia, active organic disease of the CNS, the first trimester of pregnancy and a history of hypersensitivity to metronidazole.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to those pregnant patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified. Flattening of the T wave may be seen in EKG tracings.

Dosage and Administration

For Trichomoniasis. In the Female 250-mg. tablet orally three times for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and [illegible] and differential leukocyte [illegible] fore, during, and after treatment are recommended. Vaginal inserts [illegible] mg. are available for use [illegible] in stubborn cases. *When the vaginal inserts are used,* one 500-mg insert is placed high in the vaginal vault each day for ten days and the oral dosage reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male:* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of the female partner.

For Amebiasis. Adults [illegible] intestinal amebiasis [illegible] times daily for 5 to 10 days; amebiasis, 500 [illegible] times daily for 5 [illegible] children 35 [illegible] weight [illegible] [illegible]

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WITH NO SACRIFICE OF THIAZIDE EFFECTIVENESS

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

*Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently – both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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IN EDEMA*–IN HYPERTENSION*

feel that diligent research and long hours of work by an efficient staff gave us a lead on the other states and enabled us to obtain the funds. You will have a program on the subject of EMCRO and on medical care foundations on Tuesday morning. This is our answer as to how to develop a quality review program. It is up to the members to familiarize themselves with these programs and to make them work. The success or failure of this program can have national significance. We must support this or perhaps something less desirable will be forced upon us.

This call for developing a quality control of medical care by government agencies gives the impression that it is a new concept originated by them. This seems to be the opinion of the public and perhaps of too many physicians. This opinion is not supported by facts. Hospital staffs have long been charged with the responsibility for the quality of professional care rendered in the hospital. The Joint Commission on the Accreditation of Hospitals stated that we must evaluate the quality of medical care on the basis of documented evidence to support utilization of hospital facilities. Utilization committees were set up in 1958—long before Medicare was in existence.

UTILIZATION COMMITTEE

Actions of a utilization committee by whatever name it goes should not be viewed as police action or considered punitive. Rather, it should be seen as showing an awareness of the problems facing our profession. This committee is concrete proof to the public, to the government and to critics in general that physicians are willing to solve their own problems voluntarily and not default to government intervention in the health care of our patients.

We feel that we have developed a good system for evaluating quality control of patient care. The next question is how to deliver it to the public. Ours has always been a pluralistic system, and we think it is working. There may be ways in which our present system can be improved, but these improvements, if needed, can be made within the context of our present system.

Those who profess to see a health care crisis blame it on the inadequacies of the present system. They ignore all of the complex social forces at work. Whatever our sins may be, we cannot be held responsible for hunger in this country. We cannot be held responsible for the millions of people who court heart disease and lung cancer by excessive eating and excessive smoking. We cannot be held responsible for the 50,000 or more people who die as a result of automobile accidents and the hundreds of thousands who are crippled for life; nor, can we be blamed for the drug traffic that claims thousands of lives annually.

Our nation is composed of people of varied nationalities, habits and desires. Our medical programs are geared to such diversification. Our pluralistic system encompasses all. Millions of people have socialized medicine such as those in the armed forces and V.A. programs. Other millions have prepaid group organizations, while other millions look to emergency rooms of hospitals for their service. Medicare, Medicaid, and medical insurance coverage include many million more people. This existing pluralistic system also includes those of us who still prefer our private system of fee for service that many millions of our patients seem to like.

PLURALISTIC SYSTEM

A system that combines universal access, low cost and high quality is difficult to maintain. No one has combined all these factors and applied them successfully to a broad population to the satisfaction of all concerned, such as consumers, physicians, and cost accountants. It is for this reason that the physicians of America favor a pluralistic system to be used until something better is worked out.

Time does not allow me to discuss in detail all the committees and councils that your state association is quite proud to claim. These men are the unsung heroes of our battle to maintain our status as a free organization. Most of you are members or have been members of these committees and are thoroughly familiar with their work so I am not going into detail on their accomplishments. These members along with the Board of Trustees have made my task as president much easier.

I hope I may be pardoned if most of my discussion today is of a general nature and not confined to our state problems. But I feel that what happens nationally will affect us all. I have attended several national meetings in the past two years and have had chances to talk over our problems with physicians from California, New Hampshire, West Virginia, and other scattered states, and it is almost like talking to your next door neighbor. Our problems are very similar, and our hopes and aspirations are the same.

AGE OF TURMOIL

We are living in an age of turmoil. It affects us in every facet of life. It has long since become apparent: whether it is in the field of educa-

transportation, housing, farming, nutrition, pollution, crime, religion or medical care, it's a different ballgame. The name of the game is politics. If you doubt that, take a look at the Phase II price freeze involving physicians in which a heavy fine will be levied just for not posting a statement of their charges.

President Nixon, in his speech at the AMA Convention in Atlantic City last June, stated and I quote, "I have heard a doctor say on occasions 'I am only interested in my profession. I am not interested in politics.' He had better get interested in politics or he won't have any profession to be interested in." Following the President's suggestion, I want to talk on the present status of the PAC movements.

The American Medical Political Action Committee's organization and activity concept was approved by the AMA House of Delegates at Denver in 1961 and was formally organized in 1962. The Mississippi House of Delegates recommended that we organize MPAC in 1963, and this was done later that year. The AMPAC and MPAC are separate autonomous entities and are legally apart from their sponsoring organizations. Our organization was slow in growth at first, but with our direct billing in effect, more than half our members have chosen to participate. The functions of MPAC and our Council on Legislation do not conflict in their work. The function of MPAC is to help elect good men to office, and that is their entire purpose. The Council on Legislation lobbies for or against legislation at the state level. In the present legislative session, this Council has done an excellent job, meeting monthly with legislators and keeping our communication open. The PAC theory is that it is better to put our efforts in electing good men to office rather than having to try to defeat bad legislation being supported by men not of our choosing.

MEDICAL POLITICS

It has taken us a long time, but the medical profession is finally learning there is nothing sinful, underhanded or wrong about an individual becoming involved in the business of running his country. Not too many years ago it made little difference what political party or which men were in office in Washington from the standpoint of medicine. Whenever problems arose that were peculiar to medicine, either scientific or social, the people directly involved in providing care, that is us, were usually consulted. Now because the problem is related to medicine does not mean that medical people will be consulted. On the contrary, recent history demonstrates that we have not only not been consulted, but our unsolicited advice has been ignored. By some groups we are being pictured as one whose total commitment in life is to further the suffering of the poor and aged in America.

There is a fundamental point that needs to be established if medicine, and indeed the whole structure of our society as we know it, is to survive and that is that the prime responsibility of every person in a democracy is first to be a good citizen with all that it implies. Government cannot be elective but must be a required obligation and concern of all of us.

AMPAC MEETINGS

It was my privilege to attend AMPAC meetings in Washington, D. C., in 1971 and 1972. Listening to the speeches given by Senators, Congressmen, political analysts and research analysts gave us the impression that there will probably not be any new major health bills passed in this session of Congress. Some felt the only bill with a chance was some type of catastrophic policy. Some of the speeches given were rather optimistic about a change in the mood of people around the country. There was a feeling that the wave of radically inspired disorders had passed and more conservatism has been noted. Sometime in the past year, Sen. Ribicoff of Rhode Island was quoted as saying that perhaps we should not legislate any new national health bills. He favors some type of pilot programs whereby new programs would be tried on local levels such as one or two states. We feel that this is the thinking about our EMCRO program which HEW is funding. Mississippi is one of only two states that received full funding. The funding is for two years and there may be pilot programs for further evaluation.

Let me urge that each member of our society give serious thought and study to the projects that I have discussed—the EMCRO program, the Mississippi Foundation for Medical Care, and the PAC movement. Let me urge that you investigate, and if possible, join these organizations. United we can accomplish much, but divided we shall fail. If we are to be relevant to the society in which we live, we must exercise our rightful duty of helping to form medical policy for future generations.

Someone has said that when future historians write our epitaph, let it read that here were men who tried to support intelligent progressive solu-

Constitution and By-Laws of the Mississippi State Medical Association

CONSTITUTION

Preamble

That more may live longer in the richness and comfort of health; that pain, suffering, and disease may be eradicated to the extent made possible by scientific medical knowledge; that the standards of the medical profession may be maintained on the highest plane of honor, we dedicate ourselves as physicians through this Association. Among us, membership is a privilege, earned by professional qualification, personal honor, and selfless service; it is not a right vested superficially nor by statutory licensure. Truth shall be our quest; diligence, our staff; and service, our purpose.

Article I

NAME OF THE ASSOCIATION

The name and title of this Association shall be the Mississippi State Medical Association.

Article II

PURPOSE OF ORGANIZATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi and to unite with similar associations in other states to form the American Medical Association, with a view toward the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse among the physicians and to guarding and fostering of their opinion in regard to the great problems of medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and care of disease, and in the prolonging of and adding comfort to life.

The purpose of this Association shall be to promote scientific medical research and practice and it shall be a non-profit organization.

Article III

COMPONENT SOCIETIES

Component Societies shall consist of those societies which hold charters from the Association.

Article IV

MEMBERSHIP

Section 1. Members of the Mississippi State Medical Association. Members shall be active, associate, or emeritus, acording to requirements and provisions of the By-Laws. There may also be invited guests. Membership other than associate shall be construed as active in connection with the rights and privileges accruing therefrom.

Section 2. Guests. Any physician not a resident of the state may become a guest during any annual session upon invitation of a member of the Association, and shall be accorded the privilege of participating in all the scientific work of that session.

Article V

SESSIONS AND MEETINGS

Section 1. The Association shall hold an annual session during which there shall be held daily not less than two general meetings, which shall be open to all registered members and guests.

Section 2. The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix, or change, either the time or the place, or both of the annual session.

Article VI

GENERAL OFFICERS

Section 1. The general officers of this Association shall be a President, President-elect, three Vice-Presidents, one from each Supreme Court District, Secretary-Treasurer, Speaker, Vice Speaker, and Editor.

Section 2. The President, President-elect, and Vice-Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, Vice Speaker and Editor shall be elected for terms of three years.

Section 3. The officers of this Association shall be elected by the House of Delegates on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who has failed to attend two-thirds of the past two and current annual sessions and who has not been a member for the past two years.

Section 4. In addition to these general officers, there shall be an Executive Secretary who need not be a physician or member of the Association. He shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. His compensation and expenses for duties performed shall be fixed by the Board of Trustees and confirmed by the House of Delegates.

Article VII

EXECUTIVE OR CENTRAL OFFICES

The Executive Secretary shall maintain in the city of Jackson suitable offices for the discharge of his duties and for conducting the administrative affairs of the Association.

Article VIII

HOUSE OF DELEGATES

The House of Delegates shall be the legislative, business, and policy-making body of the Association and shall consist of (1) delegates selected by the component societies under authorized apportionment, (2) the general officers of the Association, (3) all past presidents, provided they still be members in good standing of the Association, (4) members of the Board of Trustees and Councils, and (5) elected committees, Delegates and Alternate Delegates to the American Medical Association, members of the State Board of Health, and members of the Board of Trustees of Mental Institutions, all of whom must be members of this Association

Article IX

BOARD OF TRUSTEES

The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates and shall perform such duties as are prescribed by law governing directors of corporations and in the By-Laws of the Association. The Board shall consist of nine members, one from each Association District, elected for terms of three years each. A Trustee shall not serve more than three consecutive terms.

Article X

FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by annual dues, per capita assessments upon the membership, and by voluntary contributions. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, publications, and for any other purpose approved by the House of Delegates.

Article XI

THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII

AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component society at least two months before the session at which final action is taken.

BY-LAWS

Chapter I

MEMBERSHIP

Section 1. Eligibility. Each component society of the Mississippi State Medical Association shall judge the qualifications of candidates for election to membership therein, which shall be restricted to those persons who hold the degree of Doctor of Medicine from an appropriately accredited source as defined by the American Medical Association, or in lieu thereof, a foreign degree in medicine which is an acceptable equivalent to the Board of Trustees and shall be a citizen of the United States. All candidates for any degree of membership other than associate must be legally licensed to practice medicine in Mississippi. Persons who obtained this degree prior to January 1, 1917, need not comply with this requirement but must be licensed to practice medicine in Mississippi or, if offering to practice in Mississippi must be eligible for license by reciprocity and be a member in good standing of a constituent (state) association of the American Medical Association. Membership in a component society, evidenced by the payment of dues for the current year, shall be a prerequisite to membership in the Association, except that a physician upon his initial application for membership in a component society of the Association shall be required to undergo a waiting period of ninety (90) consecutive days from the date he begins the practice of medicine in the geographical area of the component society before he may be elected to membership in the component society. No physician shall be eligible for membership who has been convicted of or who has plead guilty to either a felony or a violation of a state or federal narcotics law. The duly certified court record shall be *prima facie* evidence of pleas and convictions and cause automatic revocation of membership. No physician shall be eligible for election to or continuation of membership who does not possess a currently effective federal narcotics stamp, provided, however, that physicians in full time government service who need no registration to use, prescribe, and dispense narcotic drugs and those who, by reason of type of practice, employment, inactivity, or retirement, neither prescribe nor dispense narcotics and who for this reason alone have not applied for registration shall be exempt from this requirement.

Section 2 (a). Good Standing. Only those members in good standing shall be entitled to the rights and privileges of membership. A physician not in good standing may not be elected to office nor exercise the privilege of voting or attending any session of this Association, scientific or otherwise. The name of a physician upon the properly certified roster of a component society which has paid its annual assessment shall be *prima facie* evidence of his right to register at the annual session of the Mississippi State Medical Association. No member shall participate in any of the proceedings of the annual session until he is duly registered. No delegate or other member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section. (b) Change of State Residence. In the event that a member moves from the State, his membership shall continue until, and lapse at the end of, the current fiscal year, but this provision shall not operate to prevent a physician who moves from the state continuing his membership by payment of all dues and assessments to the state Association. (c) Obligations of Membership. When the Executive Secretary of the Mississippi State Medical Association is officially informed by the secretary of a component society that a physician is not in good standing in the component society, he shall remove the name of the physician from the rolls of the Association. A member shall hold his membership through the component society in the jurisdiction of which he practices, provided that a physician living on or near a county line may hold membership in the society most convenient for him to attend. If the society in which he chooses to secure membership does not exercise jurisdiction over the area of his residence, then permission must be obtained from the jurisdiction society to facilitate his affiliation with the extra-jurisdiction society.

Section 3. Degrees of Membership. Members of the Mississippi State Medical Association shall be divided into the following classifications: Active, emeritus, and associate. (a) Active Membership. Active members shall include all eligible members of component societies in good standing, providing that all dues and assessments in this Association as may be hereinafter prescribed have been received by the Association. (b) Emeritus Members. Any members of the Mississippi State Medical Association who has been an active member for any ten consecutive years and shall have permanently retired from the practice of medicine shall be eligible for election to emeritus membership. Election to emeritus membership for reason of retirement in the case of permanent and total disability shall merit special consideration but shall be subject to ruling by the Board of Trustees. Election to emeritus membership shall be based on the recommendation of the component society and the approval of the Board of Trustees. (c) Associate Membership. Any commissioned medical officer in the United States Army, United States Air Force, United States Navy, or United States Public Health Service, or any physician in the employ of the Veterans Administration, not licensed to practice in the State of Mississippi, stationed in Mississippi, members of medical faculties of medical schools in Mississippi, approved by the American Medical Association, who are not licensed to practice in the state, any hospital intern, or any hos-

pital resident in Mississippi, may, on election to associate membership by the component society in whose jurisdiction the physician resides become an associate of the Mississippi State Medical Association. Associate members shall not vote or hold office.

Section 4. Dues and Assessments. A per capita assessment determined by the House of Delegates shall constitute the dues of the Association, which assessment shall be collected from all active members by the respective secretaries of the component societies, provided that new members shall be accepted on payment of three-fourths of annual dues after May 1 and one-half of annual dues after September 1. Each active member shall pay the prescribed dues to the officer designated by the component society for transmittal to the Executive Secretary of the Association. Dues shall include a subscription to the official publication of the Association. (a) Members Excused From Payment. The Board of Trustees may, by majority vote, excuse a member from payment of dues because of undue hardship or similar circumstances warranting special consideration provided that the component society shall have excused in full the payment of dues for periods exceeding one year. Such circumstances shall be interpreted to include extended illness and temporary disability. Members who shall have attained age 70 and who have been active members of the Association for any 10 consecutive years may, upon request, be exempt from dues for life effective January 1 after the 70th birthday, and such exemption shall continue so long as the member continues in good standing in his component medical society. (b) Emeritus Members. Physicians who have been elected emeritus members shall not be required to pay dues in the Association. (c) Payment of Dues and Delinquency. Dues of the Association are due and payable on December 31 of the year prior to that for which dues are prescribed. Failure to pay dues by April 1 of the year for which due shall result in forfeiture of membership privileges and the removal of the member's name from the rolls of the Association. A five dollar ($5.00) reinstatement cost shall be assessed against any member who is delinquent by reason of non-payment of dues after April 1 of the year for which dues are payable. A member in good standing who is called to active duty with the Armed Forces of the United States other than in the regular component shall be carried as an active member without payment of dues until such time as he is released from military service.

Section 5. American Medical Association. Members of this association desiring to be members of the American Medical Association may pay the dues or apply when eligible, for legal exemption from the dues of the American Medical Association. Those desiring to do so may pay their dues to the Executive Secretary whose duty shall be to transmit them to the American Medical Association and to obtain proper credits and receipts therefor.[1]

Section 6. Revocation of Emeritus or Associate Membership. Any emeritus or associate membership may be revoked by two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the emeritus or associate member violates any of the principles of the code of ethics or whose conduct or actions are not becoming to the honor conferred.

Chapter II

ANNUAL AND SPECIAL SESSIONS

Section 1. Time and Place. An annual session shall be held as required by Article V, Section 1, the Constitution of the Mississippi State Medical Association, which session shall in any event be held prior to the annual session of the American Medical Association. The place of the state session shall be fixed in accordance with Article V, Section 2, the Constitution of the Mississippi State Medical Association.

Section 2. Special Session. A special session of the Association or of the House of Delegates may be called by the President, with the approval of the Board of Trustees. The Board of Trustees is empowered to call a special session by majority concurrence.

Section 3. Inviting an Annual Session. A component society desiring the Association and House of Delegates to meet in annual session in a city within its jurisdiction may submit an invitation in writing or verbally through its representative to the House of Delegates at the annual session concerned with the selection of the site for the next regular scheduled meeting. The dates and site of the annual session selected may be changed by majority vote of the Board of Trustees in an emergency requiring such a change.

Section 4. Registration Privileges. Only the following shall be permitted to register at any session:

(a) Active members
(b) Emeritus members
(c) Associate members
(d) Invited guests
(e) Medical students of American Medical Association approved medical schools who are certified to the Executive Secretary of the Association by their respective deans.
(f) Interns and residents who are graduates of American Medical Association approved medical schools and who are connected with an approved hospital and who are certified to the Executive Secretary of the Association by their respective hospital superintendents in event they are not associate members of the Association.
(g) Commissioned medical officers of the United States Armed Forces who are on active duty and who if not associate members are certified to the Executive Secretary by their Post or Base Surgeons or Commanding Officers.

Section 5. Indebtedness. A member shall not be permitted to register unless all current indebtedness to both the Association and component of proper jurisdiction has been paid.

Section 6. Admittance. Admittance to any meeting of the House of Delegates, any scientific section, or any of the various exhibits at an annual session of the Association shall be limited to members in good standing, duly registered and invited guests, members in good standing of the Woman's Auxiliary to the Mississippi State Medical Association, duly accredited and registered members of the Press, and accredited technical and scientific exhibitors.

Chapter III

GENERAL MEETING

Section 1. Participation. The general meeting shall include all registered members and guests, who shall have equal rights to participate in the proceedings and discussions, but no member shall vote on any question coming before a section of the general meeting except those who have registered as members of such sections. Each section of the general meeting shall be presided over by its chairman. The address of the President and the Distinguished Service Oration shall be delivered before the general meeting at such time and place as may be arranged.

Section 2. Order. The order of exercise, papers, and discussions as set forth in the official program shall be followed from day to day until it has been completed. But no section shall be allowed to place more than five papers on its program, nor more than two invited guest essayists (out-of-state or non-member). When a section program is not completed within the time assigned, it shall not be allowed to continue into that assigned to another section.

Section 3. Time Restrictions. No address or paper before the Association, except those of the President

[1] Became effective Jan. 1, 1972.

and Orator, shall occupy more than twenty minutes in its delivery, except that guests may be allowed thirty minutes; and in formal discussion no one shall speak more than five minutes; and in informal discussion no one shall speak more than three minutes and not more than one time.

Section 4. Essayists. With the exception of the invited guests, the essayists must be members of the Association. No name shall appear more than once on the printed program to discuss a paper before the regular scientific sections unless such person qualifies for membership as provided in these By-Laws.

Section 5. Papers. All papers read before the Association shall be its property. Each paper must be read by its author, and must be deposited with the Secretary when read.

Section 6. Failure to Read Paper. No author listed on the program who fails to read a paper at the session may be allowed a place on the program of the next annual session, but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary before the annual session, he shall not suffer the penalty.

Chapter IV
SCIENTIFIC SECTIONS

Section 1. Designation of Sections. The scientific sections of the Association shall be as follows: (a) Section on Medicine, (b) Section on Surgery, (c) Section on Preventive Medicine, (d) Section on Eye, Ear, Nose and Throat, (e) Section on Pediatrics, (f) Section on Obstetrics and Gynecology, and (g) Section on General Practice.

Section 2. Section Officers. Each scientific section of the Association shall, as the last order of business during its regular meeting, elect a chairman who shall serve for a period of one year. A majority of votes cast shall be necessary to elect. Additionally, each section shall elect a secretary whose term of office shall be for a period of three years and so arranged that secretaries shall be elected by their respective sections at the same annual meeting as follows: (1) Sections on General Practice and EENT, (2) Sections on Obstetrics and Gynecology and Preventive Medicine, and (3) Sections on Pediatrics, Surgery, and Medicine.

Section 3. Program. The Council on Scientific Assembly shall place any paper in its proper section. The Council shall so arrange the program that no one section shall be given precedence over others two years in succession.

Chapter V
HOUSE OF DELEGATES

Section 1. Apportionment and Representation. Each organized county shall be entitled to representation in all regular and special sessions of the House of Delegates, one delegate and one alternate for each fifty members in the county and one delegate and one alternate for each fraction thereof, but each organized county holding a charter from this organization having made its annual report and paid its assessments, as provided in this Constitution and By-Laws shall be entitled to at least one delegate and alternate, said alternate delegates to act only in the absence of the delegate or delegates from the respective counties. No county in a component society shall be without representation in the House of Delegates; each shall be entitled to one delegate and one alternate without regard to total membership. No alternate may be seated at any regular or special session of the House of Delegates unless the delegates elected from that county shall be absent or otherwise unable to participate in the proceedings. In the event that neither the delegate nor the alternate is able to attend the regular or special session to which they have been accredited, then any *bona fide* resident of the county may, if properly registered, qualify himself as a delegate. No representative of the component society shall be seated in the House of Delegates until all his dues, assessments, and obligations to the component society have been paid. Delegates and alternates shall be elected by their respective component societies for terms of not less than two years and shall assume office on the first day of the annual session following their elections; they shall be *bona fide* residents of the counties which they represent. Their names shall be reported to the Central Office of the Association not later than thirty days prior to the first day of the annual session. Representatives of component societies shall be seated in the House of Delegates only following their proper registration of credentials from the component societies they represent.

Section 2. Meetings and Attendance. The House of Delegates shall meet annually on the first day of the annual session of the Association. The House of Delegates shall meet for the conclusion of business on the last day of the annual session immediately following the adjournment of the last general or scientific session, provided that these requirements shall not operate to prevent such other meetings of the House of Delegates during the annual session as the House itself may order or the President or Speaker may deem necessary, but no such meetings may be called at times which would conflict with the scheduled general or scientific session. Duly registered members and guests may attend all meetings of the House of Delegates provided that they occupy a distinctly separate section of the meeting hall or auditorium and further provided that they shall not be permitted to participate in any phase of the meeting of the House of Delegates except on invitation of that body. By majority vote, the House of Delegates may enter into executive session, during which time only qualified delegates and officers of the Association may remain in attendance.

Section 3. Quorum. A three-fifths majority of registered and duly seated delegates of this Association shall constitute a quorum.

Section 4. Order of Business. The order of business shall be conducted at the pleasure of the House of Delegates, provided it shall not be in conflict with either these By-Laws or the Constitution. Meetings shall be conducted according to *Sturgis Standard Code of Parliamentary Procedure,* and within the bounds of courtesy and this Constitution and By-Laws. Generally, the order of business shall be:

(1) Adoption of the Transactions of the previous meeting.
(2) Reports of Boards, Councils and Committees.
(3) Reports of Presidential Committees.
(4) Special Orders.
(5) Unfinished Business.
(6) New Business.

Section 5. Memorials and Resolutions. No memorials or resolutions shall at any time be issued in the name of the Mississippi State Medical Association by any officer or member thereof until such memorial or resolution has been approved and adopted by the House of Delegates or Board of Trustees.

Section 6. Duties and Responsibilities. It shall, through its officers and otherwise, give diligent attention to foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping stone to future ones of higher interest. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto. It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in the counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every

physician in every county in the state has been brought under medical society influence. It shall encourage postgraduate work in medical centers, as well as home study and research, and shall endeavor to have the results utilized and intelligently discussed in the component societies. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years. It shall, upon recommendation of the Board of Trustees, provide and issue charters to counties organized to conform to the spirit of the Constitution and By-Laws.

Section 7. Reference Committees. Business brought before the House of Delegates will normally be referred by the Speaker for hearing, debate, and recommendation to a reference committee. Sufficient reference committees shall be appointed by the President to expedite and assist in the deliberations of the House of Delegates. Such committees shall consist of not less than three nor more than five members, all of whom shall be members of the House of Delegates, who shall serve only during the regular or special session for which appointed. Any member of the Association shall have the privilege of appearing before a reference committee on any issue being considered. Additionally, reference committees may permit the appearance of any individual who, in the opinion of the committee, can assist its deliberations.

Chapter VI

ELECTION OF OFFICERS

Section 1. Ballot. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Section 2. Nominations. The House of Delegates on the first day of the annual session shall select a Committee on Nominations consisting of nine members of the House of Delegates, one from each Association District. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the state for the ensuing year shall be carefully considered. The committee shall nominate to the House of Delegates three names for each general officer vacancy and two names for all other offices. No two candidates for President-elect may be named from the same county. Nominations for appointment to membership on the Mississippi State Board of Health shall be made by the House of Delegates in accordance with Section 7024, Mississippi Code of 1942, provided that six names shall be submitted, three of whom shall be elected and their names submitted to the Governor as nominees from each district, provided no member shall be nominated who has served two consecutive terms. The House of Delegates shall nominate five physicians when vacancies occur on the Board of Trustees of Mental Institutions which nominations shall be submitted to the Governor in accordance with law.

Section 3. Report of Nominations. The House of Delegates shall receive the report of the Committee on Nominations and elect officers, Trustees, and Council members on the last day of the annual session.

Section 4. Nominations from the Floor. Nothing in this Chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Section 5. Executive Secretary. The Board of Trustees shall select and appoint an Executive Secretary as elsewhere prescribed in the Constitution and By-Laws of the Association.

Chapter VII

DUTIES OF OFFICERS

Section 1. President. The President shall have general supervision over all meetings of the various bodies of the Association, shall appoint all committees not otherwise provided for, shall deliver an annual address at such time and place as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall fill by appointment all vacancies occurring during his tenure of office among the general officers and on the Board of Trustees and Councils and shall be empowered to appoint such committees on an *ad hoc* basis as may be desired or required to conduct the affairs of the Association. He shall be an *ex officio* member of all Councils and committees. He shall be the real and acknowledged head, as well as the personal representative, of the medical profession of the State of Mississippi during his term of office, and insofar as practicable, shall visit by appointment the various sections of the state and the component societies of the Mississippi State Medical Association and assist the Trustees in their tasks of aiding and strengthening the component societies and in making their work more useful.

Section 2. President-elect. The President-elect shall be in charge of the work of organization, including membership, under the direction of the President, and shall exercise these duties and advise with the Vice Presidents and with the Board of Trustees in this phase of their activity. He shall be an *ex-officio* member of all Councils and committees. He shall succeed to the presidency upon the event of the death, resignation, or removal from office of the President. This automatic succession shall not operate to disqualify him from serving the next regular term of office unless he has served more than six months as President.

Section 3. Vice Presidents. The Vice Presidents shall assist the President in the discharge of his duties. They shall further assist the President-elect in the work of organization, including membership in their respective areas, and in promoting the welfare of the Association and the profession of the state.

Section 4. Speaker. A Speaker shall be elected for a term of three years. This officer may be chosen from the membership of the Association, irrespective of any affiliation with the House. The Speaker shall familiarize himself with the rules and usages of parliamentary procedure, with the laws of the House. On him shall devolve the duty of bringing before the House through the various officers and chairmen all reports and other matters that are to receive its attention. He shall preside at all meetings of the House and perform the duties usual to the position and office of chairman except in the appointment of committees, which shall be the privilege of the President.

Section 5. Vice Speaker. A Vice Speaker shall be elected for a term of three years to run concurrently with that of the Speaker. The Vice Speaker shall assist the Speaker in all duties prescribed in these By-Laws.

Section 6. Secretary-Treasurer. The Secretary-Treasurer shall be elected for a term of three years. He shall perform such duties ordinarily devolving on a secretary of a corporation by law, custom, or parliamentary usage and shall enjoy the rights and perform such other duties as may be granted or imposed in the Constitution and these By-Laws. He may delegate such duties as are herein described to the Executive Secretary who shall be responsible therefor. He shall be an *ex-officio* member of all Councils and committees.

Section 7. Executive Secretary. The Executive Secretary shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. He need not be a member of the Association nor a physician. He shall maintain a Central Office for the Association and shall be responsible for the management and proper functioning of the Central Office to the President of the Association and the Board of Trustees. He shall attend all sessions and meetings of the Association, the House of Delegates

the Board of Trustees, and shall serve at all times to perform such other duties as may be deemed beneficial to the Association by the President and Board of Trustees. He shall assist elected officers, Councils, committees, and Trustees in the performance of their duties. Under instructions from the President, he shall conduct a comprehensive program of public education and all such other activities as may disclose favorably to the public at large the aims, objectives, and goals of service of the medical profession in Mississippi. He shall, when requested, place himself in position to assist any of the component societies of the Association and he shall attend meetings of the component societies when invited by officers thereof. He shall be made custodian of records, books and papers belonging to the Association and he shall keep account of and promptly place under the supervision of the Secretary-Treasurer such funds as may be delivered into his hands in the name of the Association. He shall give bond at the expense of the Association in such amount as may be required. He shall provide for the registration of the members and delegates at the annual session and cooperate in preparing for and arranging all functions of the Association, including the annual session. He shall procure an exact transcript of all proceedings of the House of Delegates. He shall maintain a register of all legal practitioners in Mississippi and he shall maintain detailed and exact records of the membership with regard to component societies, the Mississippi State Medical Association, and the American Medical Association. He shall issue evidence of membership to each physician who pays the annual assessment and is accepted in the Mississippi State Medical Association. He shall maintain close and complete liaison with the American Medical Association and shall keep the component societies informed of activities, programs, and mandates of both the state Association and the American Medical Association. He shall publish from the Central Office such memoranda, bulletins, and miscellaneous publications as may be directed by the President, the Board of Trustees, and the House of Delegates. He shall conduct the official correspondence of the Association as he may be directed. He shall employ such assistants as may be required, upon authorization of the Board of Trustees. He shall supply each component society with blank forms to be used in connection with membership and reports. He shall maintain records of monies paid by the component societies for assessments and dues. He shall prepare and publish under the direction of the President and Board of Trustees such programs as may be necessary for official functions of the Association. He shall be reimbursed for expenses incurred in the performance of his duties, separately and in addition to his regular compensation.

Chapter VIII

BOARD OF TRUSTEES

Section 1. Board of Trustees. The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates. It shall consist of nine members, one from each Association District, where terms of office shall be three years and so arranged that only three members are elected annually. A Trustee shall not serve more than three consecutive terms. During vacation, the Board of Trustees shall exercise the powers conferred upon the House of Delegates by the Constitution and these By-Laws, provided that in the exercise of these powers thus conferred, the Board of Trustees shall neither consider nor act to contravene any action, mandate, or policy of the House of Delegates which may still be in effect.

Section 2. Officers of the Board. The Board of Trustees shall elect from its membership a Chairman, a Vice Chairman, and a Secretary for terms of one year during the last day of the annual session following adjournment of the House of Delegates. These officers of the Board shall compose its Executive Committee. The duties of the Secretary may be delegated to the Executive Secretary who shall maintain such special records and transcripts of meetings as the Board may desire.

Section 3. Meetings of the Board. The Board of Trustees shall meet daily during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of any three members of the Board.

Section 4. Executive Committee. The Executive Committee of the Board of Trustees shall be empowered to act in behalf of the Board on all matters delegated to it by majority vote of the Board. The acts of the Executive Committee, however, shall be subject to confirmation by the Board.

Section 5. Reports of the Board of Trustees. The Board of Trustees shall make an annual report to the House of Delegates and such supplemental reports as necessity may require at a time designated in the regular transaction of the business of the House. The report shall be made by the Chairman, the Vice Chairman, the Secretary, or the Executive Secretary. The reports of the Board shall be made a portion of the annual transactions and proceedings of the Association.

Section 6. Duties of Trustees. Each Trustee shall be organizer and arbiter for his Association District. He shall visit the component medical societies within his District during each year and shall make an annual report of his activities and of the condition of the medical profession of each county of his District. Each Trustee shall be reimbursed for expenses incurred by him in traveling within his District or attending special meetings in the performance of his official duties, which will be allowed upon presentation of an itemized and documented account. This provision shall not be construed to include his expenses in attending the annual session of the Association.

Section 7. Public Policy. The Board of Trustees shall have the right to communicate the views of the medical profession and of the Association in the State of Mississippi with regard to matters of medical science, health, sanitation, and allied spheres of activity. It shall approve all memorials and resolutions issued but shall not issue memorials and resolutions heretofore prohibited in these By-Laws.

Section 8. Association Districts. The State of Mississippi shall be subdivided into Association Districts by counties, provided that all counties in a component society shall be in one Association District. These districts are defined as follows:

District 1:	Bolivar, Coahoma, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington.
District 2:	Benton, DeSoto, Lafayette, Marshall, Panola, Tate, Tippah, and Yalobusha.
District 3:	Alcorn, Calhoun, Chickasaw, Clay, Itawamba, Lee, Lowndes, Monroe, Noxubee, Oktibbeha, Pontotoc, Prentiss, Tishomingo, and Union.
District 4:	Attala, Carrol, Choctaw, Grenada, Holmes, Montgomery, and Webster.
District 5:	Hinds, Issaquena, Leake, Madison, Rankin, Scott, Sharkey, Simpson, Smith, Warren, and Yazoo.
District 6:	Clark, Kemper, Lauderdale, Neshoba, Newton, and Winston.
District 7:	Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, and Wayne.
District 8:	Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson.
District 9:	Hancock, Harrison, Jackson, and Stone.

Chapter IX

COUNCILS

Section 1. Councils. Councils of the Association shall be elected standing bodies of the House of Delegates, responsible thereto. There shall be a Council on Medical

Service, a Council on Scientific Assembly, a Judicial Council, a Council on Constitution and By-Laws, a Council on Legislation, a Council on Budget and Finance, an Editorial Council, and a Council on Medical Education. A Council member shall not serve more than three consecutive terms.

Section 2. Council on Medical Service. The Council on Medical Service shall be charged with the responsibilities of ascertaining and studying all aspects of medical care in Mississippi. It shall examine and make available all facts, data, and opinion on timely and adequate medical care. It shall investigate social and economic aspects of medical care and report its evaluations and findings. It shall suggest means of distribution of adequate quality medical service to the public consistent with the policies of the Association. It shall act as a factfinding and advisory body of the Association. Under its jurisdictions, there shall be assigned the activities of the Association in medical service, emergency service programs, indigent care, and allied medical agencies. There shall be one member from each Association District elected for a term of three years and so arranged that only three members shall be elected for full terms each year. The Council on Medical Service shall appoint Committees on Occupational Health, Maternal and Child Care, Mental Health, Blood and Blood Banking, and Nursing. Each committee shall consist of not less than five nor more than seven members appointed for periods of not less than one nor more than three years.

Section 3. Council on Scientific Assembly. The Council on Scientific Assembly shall be composed of the Secretary-Treasurer and the chairman and secretaries of the several scientific sections. The Secretary-Treasurer shall be chairman of the Council. Upon this Council shall devolve the duties and responsibilities of planning the annual session to include all scientific activity and the programming and scheduling of annual session events. The Council shall be empowered to appoint such committees for terms not to exceed one year as may be necessary to assist in the discharge of these duties.

Section 4. Judicial Council. The Judicial Council shall consist of nine members elected for terms of three years each, one from each Association District. The judicial powers of the Association shall be vested in this Council whose decision shall be final. The Council shall have jurisdiction in all questions involving membership in the Association, all controversies arising under the Constitution and these By-Laws, interpretation and application of the Principles of Medical Ethics of the American Medical Association, controversies between two or more component societies of the Association and among members of the Association. The Council shall have appellate jurisdiction in questions and controversies referred to the state Association by appropriate and authorized bodies of component medical societies. Appeals shall be perfected within six months following the date of decision by the constituted authority of the component society. The Council, under these several authorities, may conduct such hearings as may be necessary and after due and legal processes may, by majority opinion, censure, suspend, or expel any member for infraction of the Constitution or these By-Laws.

Section 5. Council on Constitution and By-Laws. The Council on Constitution and By-Laws shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be referred all suggested amendments and changes in the Constitution and By-Laws of the Association for recommendation to the Board of Trustees and House of Delegates.

Section 6. Council on Legislation. The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees.

Section 7. Council on Budget and Finance. The Council on Budget and Finance shall consist of five members elected by the House of Delegates for terms of three years each which are so arranged that not more than two members shall be elected annually. This Council shall receive reports of the finances of the Association and to it shall be referred all matters pertaining to the annual budget. The Council shall report annually to the House of Delegates, making specific recommendations on the annual budget of the Association. This Council shall be responsible to the Board of Trustees.

Section 8. Editorial Council. The Editorial Council shall consist of the Editor and the Associate Editors, elected by the House of Delegates to serve two years, and the former shall serve as chairman. To this Council shall be referred all reports of scientific subjects and all scientific papers and discussions presented before the Association and its component societies. The Council shall consider for publication in the official organ of the Association such papers, reports, and other data as may serve to further and advance scientific medicine in Mississippi. It shall exercise editorial authority over the official organ of the Association. This Council shall be responsible to the Board of Trustees.

Section 9. Council on Medical Education. The Council on Medical Education shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be assigned the responsibilities of encouraging undergraduate and postgraduate study of medicine, licensure, and facilities for medical education in the state. This Council shall be responsible to the Board of Trustees.

Chapter X

COMMITTEES OF THE BOARD OF TRUSTEES

Section 1. Committees of the Board of Trustees. Standing committees of the Board of Trustees shall consist of the Advisory Committee to the Medical Auxiliary, Peer Review Committee, the Committee on Publications, and the Committee on Medicine and Religion. All committees of the Board of Trustees shall be appointed by the Board for terms specified unless their selection is otherwise prescribed.

Section 2. Advisory Committee to the Medical Auxiliary. The Advisory Committee to the Medical Auxiliary shall consist of three members appointed for terms of three years each. The committee shall be charged with the responsibility of advising the Woman's Auxiliary to the Mississippi State Medical Association on matters of organization and program activity relating to the supportive role of the Auxiliary in its work with the Association.

Section 3. Peer Review. The Committee on Peer Review shall consist of nine members, one from each Association district, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on any disciplinary body of the Association or its component medical societies. To this committee shall be assigned the work of peer review, including but not limited to resolution of differences between patient and physician, review of the quality of medical care, adequacy and/or reasonableness of fees, whether due or paid from private or public sources, utilization of health care resources, and liaison with private and public sources of medical care financing. The committee is empowered to encourage a response from any member of the Association in writing or by personal appearance, authority to initiate investigations on its own motion, and authority to file charges against a member in the name of the

committee before the Judicial Council or a disciplinary body of a component medical society. Under no circumstances, however, shall the Committee on Peer Review exercise any disciplinary function nor shall it be empowered to alter the status or standing of any member. The committee shall be empowered to prescribe its rules of operation which shall not be in conflict with the policies or By-Laws of the Association. The committee shall also encourage and assist component medical societies in forming Committees on Peer Review at the local level.

Section 4. Committee on Publications. The Committee on Publications shall consist of six members. These shall consist of the Editor, the two Associate Editors, and three others, the three latter being appointed by the Board of Trustees for terms of three years which are so arranged to provide for appointment of one such member annually. The chairman of the committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the official Journal of the Association. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the Journal, reporting annually its deliberations.

Section 5. Committee on Medicine and Religion. The Committee on Medicine and Religion shall consist of six members appointed for terms of three years each and so arranged to provide for appointment of two members annually. The committee shall be responsible for formulating a program in the field of medicine and religion and for carrying out such assignments as may be made in this connection by the Board of Trustees.

Section 6. Committee on Long-Range Planning. The Committee on Long-Range Planning shall consist of five members appointed for terms of five years each and so arranged to provide for appointment of one member annually. This committee shall receive charges from the Board of Trustees and shall assess developments and requirements in fields of association activity, making recommendations for courses of action to achieve maximum possible effectiveness in all fields of association activity.

Chapter XI
RULES AND CONDUCT

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XII
COMPONENT SOCIETIES

Section 1. Component Societies. All component societies now in affiliation with this Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Board of Trustees and approval by the House of Delegates, receive a charter from and become a component part of this Association. The Board of Trustees and House of Delegates, on recommendation by the Judicial Council, shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and By-Laws.

Section 2. Number of Societies. Only one component medical society shall be chartered in any county but nothing in this section shall be construed as to prohibit unofficial organization of medical clubs or other county level groups of physicians whose purpose it is to further and advance scientific medicine and postgraduate medical education.

Section 3. Members of Societies. Each component society shall judge the qualifications of its own members, but as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is qualified under Chapter I, Section 1, of these By-Laws shall be eligible for election to membership. Before a charter is issued to any component society, full and ample opportunity shall be given to every such physician in the county to become a member.

Section 4. Right of Appeal. Any physician who may feel aggrieved by the action of the society of his county or District in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Judicial Council, which, upon a majority vote, may permit him to petition for membership in an adjacent society.

Section 5. Evidence of Appeals. In hearing appeals, the Judicial Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, efforts at a conciliation and compromise shall precede all such hearings.

Section 6. Area Jurisdiction. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 7. Professional Authority. Each component society shall have general direction of the affairs of the profession in its jurisdiction and shall constantly use its influence to the moral and professional betterment of its physicians, to the end that the membership shall embrace every qualified physician in its jurisdiction.

Section 8. Meetings. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall especially be encouraged to do postgraduate work, and to give the society first benefit of such labors. Official positions and other preferments shall be unstintingly given to such members.

Section 9. Delegates. Each county shall be entitled to representation in the House of Delegates of this Association, one delegate for each fifty members or fraction thereof. Delegates shall be elected for terms of not less than two years and societies shall report such elections to the Executive Secretary of the Association in no event later than thirty days before the annual session.

Section 10. Duties of Component Society Secretaries. The secretary of each component medical society shall perform such duties as are usual and customary to his office. He shall maintain the official roll of membership for his society, shall collect dues and assessments, and shall make official reports as elsewhere prescribed in these By-Laws to the Association, transmitting dues in behalf of component society members. He shall conduct the official correspondence of his component medical society.

Chapter XIII
FISCAL YEAR

The fiscal year of the Association and its component county societies shall begin January 1 each year and end on December 31 following, but membership in the state Association shall not lapse until April 1 of that year.

Chapter XIV
AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, after the amendment has laid upon the table for one day.

Chapter XV
REPEALING AUTHORITY

Upon adoption of these By-Laws, all previous By-Laws, motions of record, mandates, policies, rules and regulations in conflict therewith are hereby repealed, except that officers elected to serve in the Association and its component societies shall continue their incumbency until the completion of their previously prescribed terms and their successors elected under the current By-Laws.

Advertisement

"The history of science, and in particular the history of medicine... is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

– George Sarton, from "The History of Medicine Versus the History of Art"

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of ph[illegible]

13.3%
Yes, it would be useful[illegible]

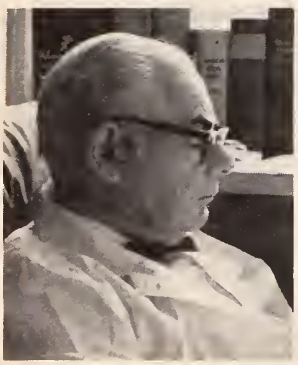
86.7%
No, it would [illegible]

Dialogue

Would it be useful in clinical practic to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really determined.

The Bureau of Drugs suggested the package sert as a possible mean communicating informa on relative efficacy of d to the physician. I find objectionable, since I not believe the physi should have to rely on source for final scien truth. There is also a p tical objection: Since physicians actually pense drugs, they sel see the package insert any event, I would m tain that the physic should know what drug wants and why without pending on the governm or the manufacturer to him.

Undoubtedly, physici are swamped by exces numbers of drugs in s therapeutic categories. I am well aware that m drugs within such ca gories could be elimina without any loss, or haps even some profit the practice of medic But, in my opinion, neit the FDA nor any ot single group has the exp tise and the wisdom ne sary to determine the "drug of choice" in areas of medical practic

Maker of Medicine

nneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



In my opinion, it is not
e function of any governnt or private regulatory
ency to designate a "drug
choice." This determinan should be made by the
ysician after he has reved full information on
e properties of a drug,
l then it will be based on
s experience with this
ug and his knowledge of
e individual patient who
seeking treatment.
f an evaluation of comrative efficacy were to be
de, particularly by govnment, at the time a new
ug is being approved for
rketing, it would be a
eat disservice to medie and thus to the patient
he consumer. For exam, when a new therapeu- agent is introduced, on
e basis of limited knowge, it may be considered
be more potent, more
ective, or safer than
oducts already on the
rket. Conceivably, at
s time the new drug
ld be labeled "the drug
choice." But as addinal clinical experience is
umulated, new evidence
y become available.
ter, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use — information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

What is your opinion, doctor?
Send us your comments on the above issue.

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The President Speaking

'Department of Family Practice'

CHARLES R. JENKINS, M.D.
Laurel, Mississippi

THE FULFILLMENT of a dream that began in the hearts and minds of several Mississippi general practitioners almost three years ago is now nearing fruition. That dream was to see established a department of family practice at the University of Mississippi Medical School. Such a department would train young physicians in primary and total care and upon completion of a three year residency program would qualify them to take their boards and if they passed be certified by the American Board of Family Practice. The present plans call for the opening of a department of family practice in July, 1973. Dean Robert E. Blount has recently appointed a task force of seven doctors to begin the search for a properly qualified physician to head the new department. Six department heads at the medical school and Dr. James O. Stephens of Magee, president of the Mississippi Academy of General Practice, make up the selection committee. They have already begun screening a list of prospective candidates.

The idea of a family practice specialty originated almost 12 years ago among officers of the American Academy of General Practice, but real impetus was given to the movement about five years ago when the AMA approved the concept and appointed the Willard Committee to come up with the necessary definitions and standards of the new discipline. This committee, of which Dr. William E. Lotterhos of Jackson was a member, worked long and diligently and in February of 1969 the Board of Family Practice became the 20th specialty.

Within the next few months officers of the Mississippi Academy of General Practice began meeting with the Dean and various faculty heads to establish such a department at the University of Mississippi Medical School. A $36,000.00 grant from the Family Health Foundation of America assisted in financing much of the early planning. One year ago Dr. Walter Treadwell of the medical school faculty was given the task of coordinating the movement. He has worked diligently with the committee of the Mississippi Academy of General Practice to formulate plans for this department.

Further impetus was gained when the 1970 House of Delegates of the MSMA instructed the officers of MSMA to assist in every way possible the establishment of this department.

In 1972 the Mississippi State Legislature, by increasing the appropriation for the medical school, made possible the funding. About $250,000.00 to $300,000.00 of the medical school funds have been allocated for this purpose. When the chairman of the new department of family practice has been selected, progress should be rapid.

There are 22 departments of family practice and 108 approved residencies in the United States today. Both of these numbers should be substantially increased before July, 1973, as many

(Turn to page 314)

JOURNAL OF THE
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EDITORIALS

Changes in the Practice of Medicine

HAVING TRAINED and practiced during the most exciting era in medical history, I find it interesting to note the changes that occur. I like to begin with Prontosyl, the precursor of sulfa, the first of the antibiotics introduced when the armamentarium of the practitioner was very limited and medicine was perhaps more art than science. Although the field of surgery was far advanced, vascular surgery, as we know it now, was unheard of. At that time a repair of a cardiac laceration was quite a feat and was approached with fear and trembling.

Most every practitioner of the day spent at least a part of his day giving arsenicals and bismuth by injection in the treatment of syphilis and each was equipped with sounds for the dilatation of urethral strictures.

Cardiac wards were full of congestive heart failure secondary to syphilitic aortic insufficiency, and an admission with lobar pneumonia carried a mortality of 35 per cent.

Malaria was commonplace and any recent graduate of the day was adept at identifying the parasite through the microscope. Today malaria is virtually unknown in this country, syphilitic vascular disease, syphilitic CNS disease, and Charcot's joints are of little more than academic interest. Pneumonia seldom reaches the state of complete consolidation. Gonorrheal urethral strictures are so rare today that on recent state board examinations, most often it was not listed as a likely cause of posterior urethral obstruction.

Thirty years ago "Cheaper by the Dozen" was an entertaining best seller and large families were commonplace and considered proper. Today we are concerned with our ecology and are seriously concerned about over-population. Strides in medicine have produced a whole new generation of active elders but also have filled nursing homes and institutions with senile vegetative individuals who are "waiting to die." We have made able, productive individuals of many with hereditary disease—previously fatal—but who can be sure of the near generations of their offspring.

Some vascular surgery and nearly all transplant surgery is so demanding both professionally and economically that the time may soon appear when decisions will have to be made as to whether one is worth salvaging.

Only time will determine the good from the bad.

W. MONCURE DABNEY, M.D., Editor
Crystal Springs, Miss.

Family Planning and the Health Department

The Mississippi Delta is fortunate in many respects, not the least of these being the fact that it has had active county health departments in most of its counties since the early 1920's. To the old timers who vividly remember the frequent floods before the last great flood of 1927, the health departments where we went for our yearly typhoid injections were an important part of our health care facilities.

Times have changed; disease incidences have changed; and now one of the most important diseases we must fight in our efforts to maintain the health of our people is that of overpopulation. Possibly the population crisis isn't classified as a disease, but some of its results should be so classified. Infant mortality and morbidity due to maternal malnutrition and poor living standards surely must be treated as diseases. These represent only a portion of the problems associated with excessively large families numbering more than can possibly be given even minimum material care. Certainly we have all read numerous articles citing poor nutrition in infancy as the possible cause of mental retardation and many learning problems. We recognize the fact that proper diet in infancy is basic for future mental as well as physical growth and development.

It is felt by some members of our profession that the quickest and best approach to the problems of overpopulation, pollution, ecology and all the other popular phrases of the present is to go to the root of the problem and attempt a workable program of family planning to reach those who need it most. In our private practices we can easily teach family planning to those of our patients who come for routine health care. This is not enough to reach those who most need help. We only scratch the surface of the total number needing such care.

In a state where almost 4,000 residents received government food stamp subsidy during the month of January, 1972, and where a large percentage of our residents are classified as having an income below the poverty level, the health department is the logical agency to carry out a family planning program. By custom and long habit, many patients will attend clinics at the local health department when they will not go to a private physician's office. A great many of the women most in need of family planning are not eligible for the Medicaid program, and still are unable to afford private care. This large group must be cared for by the health department if our private facilities are to escape further overloading.

The health department began family planning in this area in 1964. There has been much more emphasis on this program in recent years since a Federal grant allowed the Delta Pilot Project to enlarge the family planning program. This has been carried out partly by health department personnel, but private physicians have been most generous in giving of their time to staff clinics in their particular areas.

In Sunflower County alone, the total number of patients enrolled in this program has grown from 359 in the fiscal year July, 1969 to July, 1970 to a total of 680 for the year July, 1970 to July, 1971. On Mar. 1, 1972, there were 880 patients

TABLE 1
BIRTHRATES

	Bolivar	*Leflore*	*Humphreys*	*Sunflower*	*Washington*
1966 Total	1,504	1,220	488	1,054	1,892
White	297	301	91	183	590
Nonwhite	1,207	919	397	871	1,302
1970 Total	1,355	1,068	332	913	1,835
White	291	310	85	197	614
Nonwhite	1,064	758	247	716	1,221

TABLE 2
NUMBER OF BIRTHS NOT ATTENDED BY A PHYSICIAN

	Bolivar	*Leflore*	*Humphreys*	*Sunflower*	*Washington*
1966	505	658	299	602	439
1967	361	525	242	531	393
1968	242	476	211	527	304
1969	148	396	161	405	252
1970	68	370	115	270	227

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choose the topicals that give your patient–

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Special Petrolatum Base
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In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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When you select this familiar antibiotic for IV infusion you have available a broad dosage rang that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyc hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water But when 4 grams or more per day is given, Lincocin should be diluted in n less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

nfections caused by susceptible strains
of pneumococci, streptococci, and
staphylococci, including penicillin-
esistant strains. Staphylococcal strains
esistant to Lincocin (lincomycin
ydrochloride, Upjohn) have been
ecovered. Before initiating therapy,
ulture and susceptibility studies should
e performed. Lincocin has proved
aluable in treating patients hyper-
ensitive to penicillin or cephalosporins,
ince Lincocin does not share
ntigenicity with these compounds.
lowever, hypersensitivity reactions
ave been reported, some of these in
atients known to be sensitive to
enicillin.

Well tolerated at infusion site: Lincocin
ntravenous infusions have not
roduced local irritation or phlebitis,
hen given as recommended. Lincocin
usually well tolerated in patients who
re hypersensitive to other drugs.
evertheless, Lincocin should be used
autiously in patients with asthma or
gnificant allergies.

n patients with impaired renal function,
e recommended dose of Lincocin
ould be reduced to 25—30% of
e dose for patients with normal
idney function. Its safety in
egnant patients and in infants
ss than one month of age has
t been established.

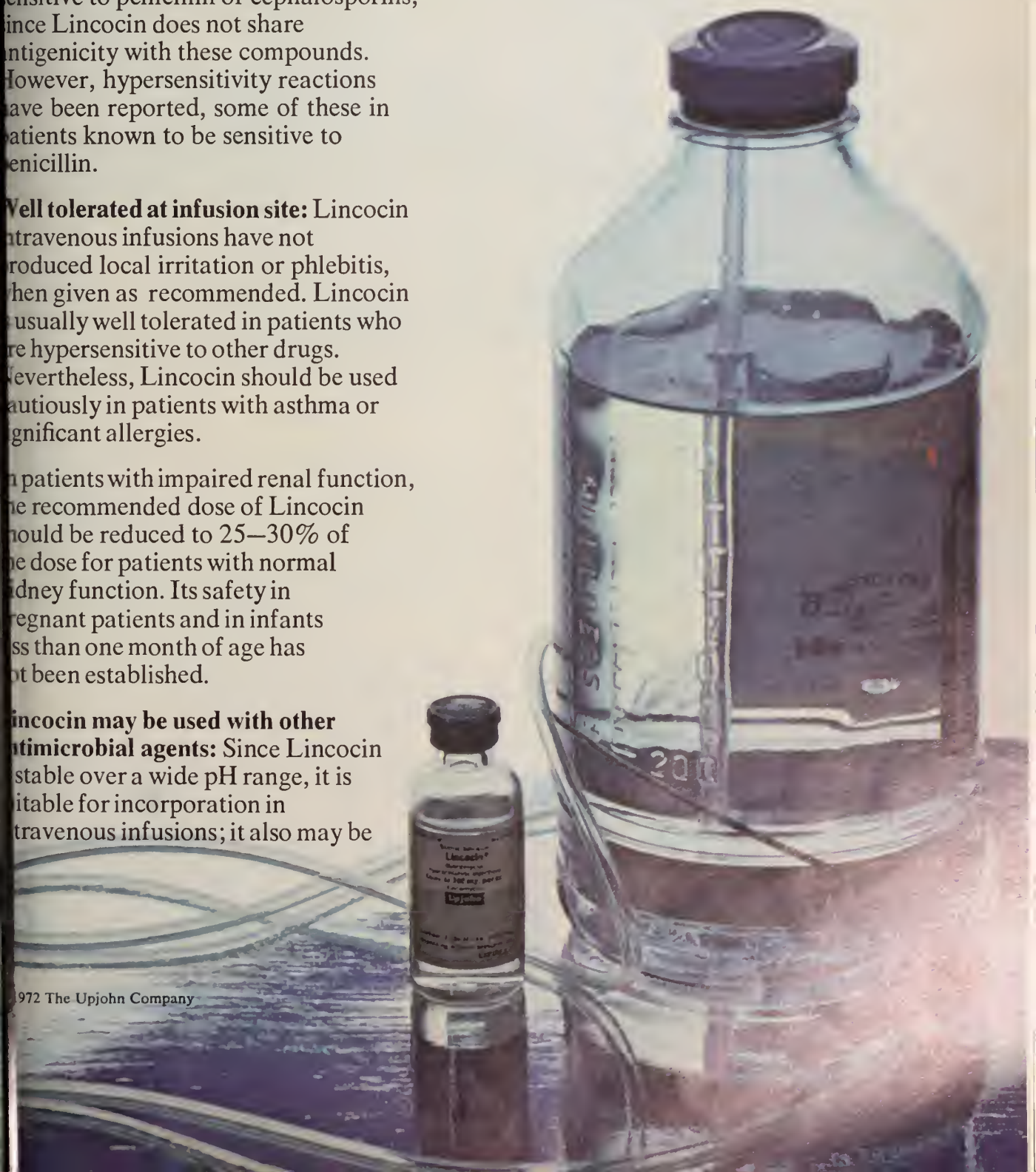
incocin may be used with other
ntimicrobial agents: Since Lincocin
stable over a wide pH range, it is
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travenous infusions; it also may be
administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatm
Skin and mucous membranes—Skin ras urticaria, vaginitis, and rare instances of foliative and vesiculobullous dermatitis h been reported. *Liver*—Although no direct lationship to liver dysfunction is establish jaundice and abnormal liver function (particularly serum transaminase) have b observed in a few instances. *Cardiovasc* —Instances of hypotension following pa teral administration have been report particularly after too rapid IV adminis tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more ad istered IV, dilute in 500 ml of fluid administer no faster than 100 ml per h *Special senses*—Tinnitus and vertigo h been reported occasionally. *Local reacti* —Excellent local tolerance demonstrate intramuscularly administered Linco (lincomycin hydrochloride). Reports of p following injection have been infrequ Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in disti water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500* Capsules—bottles of 24 and 100. *Ste Solution, 300 mg per ml*—2 and 10 ml v and 2 ml syringe. *Syrup, 250 mg per 5* —60 ml and pint bottles.

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in the family planning program in Sunflower County, with 298 of these being new patients admitted since July 1, 1971. Obviously, family planning is needed by many more women, and it is hoped the program will continue to attract new patients.

In our family planning clinics, there are available several methods of contraception. The method prescribed, depending on the patient's wishes and the physician's judgment, may be one of three types of intrauterine devices, oral contraceptives of several varieties, foam, or condoms. These latter two varieties are usually prescribed for the time necessary for pills to become effective. Private physicians are urged to send their patients to the clinic for service if the patient is likely to drop out of their private program for financial reasons. In three Delta counties, Leflore, Sunflower and Washington, as of Mar. 1, 1972, the family planning patients are divided by methods as follows: IUD—1,049, oral contraceptives—2,048, other—73. Patients on oral contraceptives outnumber those with IUD's approximately two to one.

Every new patient coming to a family planning clinic is first interviewed by a nurse and laboratory work including urinalysis, hemoglobin, VDRL, and blood sugar is done. The blood pressure and weight are also checked. The attending physician then sees the patient for a physical examination including pelvic examination and Pap smear. All patients continuing on the program must have a yearly check-up including pelvic examination and Pap smear. Every effort is made to urge the patient to continue on the program and to return for check-ups.

For the past five years, statistics available from the Health Department show a marked drop in the birth rate for this area. Birth rates for five Delta Counties are compared in 1966 and 1970 in Table 1.

It has been a fact of life for the Delta in the past that many of our babies have been delivered by midwives in the home, especially for the non-white population. Records of the Department of Vital Statistics show that fact has changed a great deal. For our live births not attended by a physician, we now have these figures shown in Table 2.

It is recognized that statistics can be quoted in support of any position taken. The marked drop in the number of births not attended by a physician shows that we are succeeding in our efforts to give increasingly better medical care to all of our population. Certainly all patients delivered by a physician can be given instructions in family planning. The program of family planning as carried on by the health department hopes to reach all maternity patients referred by private physicians as well as all those depending on the health department as their only source of medical care.

Virginia Tolbert, M.D.
Ruleville, Miss.
Presented to the Delta Medical Society, April, 1972

Journalist Discusses Unusual Set of Values

Three cheers and a tiger for anything that can be done honestly and realistically to reduce health costs and to protect families against the gnawing dread of catastrophic illness which not only brings physical pain but also financial disaster.

More and more Americans are becoming concerned with this ancient dilemma and this is good. But there are a couple of points which ought to be examined carefully, items which for the most part are buried under an avalanche of public prejudice.

The first is that persons connected with health —doctors, nurses, technicians, hospital employes —should have no degree of self-interest. These people, so runs the tacit implication, should be dedicated solely to the almost sacred duty of keeping other human beings in good health or restoring them to that desired state.

The second point concerns the drug industry. Here again much of the public has the philosophy that drug companies also should exist only for altruistic purposes. There should be no profit in researching, preparing and selling drugs, according to some people, because the product deals with health.

Ergo, any activity which concerns physical well-being should be conducted solely for the gain of society and not for any monetary gain of the participants.

This is fallacious reasoning. Until recent decades, nursing was a labor of love and those who entered it practically were expected to accept permanent poverty. So it was, too, with the non-professional health workers. People of that classification who toiled in hospitals somehow were considered lower on the pay scale than their counterparts in industry. Doctors? Well, shouldn't they take a lot less money because their work was so rewarding in itself?

Nevertheless, Americans have been getting and paying for better medical care in recent years than ever before in the nation's history. There has been a tremendous upsurge in demand for physicians' services because Medicare and Medicaid, for one thing, lowered economic barriers to medical care for millions without doing anything immediately to provide more suppliers of this care.

EDITORIALS / Continued

Part of the improving health picture is due to better drugs—and here the drug industry gets rapped by many persons who think the industry always is more interested in huge profits instead of making people well. Yet, because of private research and invention of new drugs, most illnesses can be treated without hospitalization, death rate of babies under a year old has dropped dramatically, people will live longer.

It is reported that there is no drug "monopoly" because 1,300 companies make pharmaceuticals in the United States and that the manufacturer's profit on an average prescription price of $3.68 is only 20 cents. Also it is asserted that the drug industry spends over $600 million a year on sheer research.

This is no defense of doctors who overcharge or drug companies which do likewise. But we have set up an unusual set of values. A person can make money honestly in other businesses and we say little, even applaud him, but we want health care for almost nothing and we score those who profit in the trade. Bad health we consider as bad luck, an evil stroke of fate, and we figure we shouldn't have to pay for something we don't like and didn't order from the menu of life.

HOWARD PRESTON, Associate Editor
The Plain Dealer
Cleveland, Ohio
Reprinted with permission

Editor's Note: This article concerns one man's opinion of the drug price/profit controversy now being debated privately and publicly.

PRESIDENT *(Continued)*

medical schools have family practice departments in the planning stage and most are farther advanced than our University.

No state is in more need of physicians, and particularly family practitioners, than Mississippi. Our average of one doctor to approximately 1,400 patients is the highest in the nation, and this is not a true figure because of the distribution. Many communities have no doctor and others that still have physicians will not be able to replace them in case of death or retirement.

The family physician, once called the vanishing American, has emerged during the past two years as a key figure in the care organization picture. In serving his patient as physician of primary contact, evaluating total health care need and referring the patient as necessary, accepting responsibility for continuous and comprehensive care as a coordinator, this new offspring may turn out to be the answer to many health care organization problems. ★★★

PERSONALS

JERRY R. ADKINS of Biloxi was elected Memorial Gifts Chairman at the annual meeting of the Harrison County Heart Association.

EDWIN E. BENOIST of Natchez was honored by members of the medical staff of Jefferson Davis Memorial Hospital "in appreciation for his many years of service to this institution and to the ideals of medicine." Dr. Benoist was presented with a watch and an engraved plaque.

WILLIAM J. CARR, JR., of Gulfport announces the new location of his office at 0406 Courthouse Plaza. Dr. Carr limits his practice to pediatrics.

WOODY D. DAVIS announces the opening of his office for the practice of ophthalmology at St. Joseph Medical Plaza in Meridian.

JAMES D. HARDY of Jackson was named to the 1972 Frederick E. Kredel Honorary Professorship at the Medical College of South Carolina at Charleston. Dr. Hardy gave the second Kredel Lecture and was presented the "Cubed Sphere" "for his tremendous productivity in the field of surgery—teaching, scientific writing, and research."

MARVIN V. HARVEY of McComb announces the removal of his office to the corner of Maryland Avenue and 5th Street.

SAMUEL B. JOHNSON of Jackson will again serve as chairman of the board of Mississippi Opera Association for the next season.



"Deposit 50¢ and the couch will vibrate."

J. Harvey Johnston, Jr., of Jackson is on the board of directors of the Mississippi Power and Light Company.

Bobby F. King of Iuka has been appointed to the State Park Commission by Governor Bill Waller.

Lawrence W. Long of Jackson was elected to the Board of Governors of the International College of Surgeons at its recent meeting in Rome. Dr. Long was also named assistant secretary of ICS after serving the constitutional maximum of four years as treasurer.

J. Elmer Nix, Bobby G. Spell, and Sidney R. Berry of Jackson announce the dissolution of the Jackson Orthopedic Group at 408 Medical Arts Building. Drs. Nix and Berry will still have offices at that location. Dr. Spell now has offices at 2747 Old Canton Road.

Charles Pruitt, Jr., of Magee was elected vice chairman of the Mississippi Republican Executive Committee during the state's GOP convention in Jackson.

Martin A. Schiefer announces the opening of his office for the practice of medicine at 338 North Mart Plaza in Jackson.

Harry J. Schmidt, Jr., of Biloxi has been elected chairman of District IX of the Mississippi Heart Association. Jerry R. Adkins of Biloxi was named medical representative of the district.

Richard J. Schunior, general surgeon, and R. J. Lorentz, ophthalmologist, announce the opening of their new office at 904 Highway 11 South in Picayune.

Frederick E. Tatum of Hattiesburg was elevated to the presidency of the Mississippi Heart Association during the annual assembly held in Jackson.

Reginald P. White of Meridian has been named winner of the Liberty Bell Award for outstanding community service, presented by the Young Lawyers Section of the Lauderdale County Bar Association.

Noel C. Womack, Jr., and T. G. Ross of Jackson were among Millsaps College alumni leaders who were honored with a luncheon at the college on the annual Past Presidents' Day.

John R. Young of Natchez, Jetson P. Tatum of Meridian, and Joe M. Ross, Jr., of Vicksburg have been nominated by Governor Bill Waller to serve four year terms on the Board of Trustees for state eleemosynary institutions, or charity hospitals.

NEW MEMBERS

Evans, S. R., Jr. Born Greenwood, Miss., Aug. 17, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1964; interned University Medical Center, Jackson, Miss., one year; surgery residency, Cornell University Medical College, New York, N.Y., 1965-69; surgery fellowship, same, 1969-71 and cancer training, Memorial Hospital for Cancer, New York, N.Y., 1969-71; elected by Central Medical Society.

Hoagland, Robert Allison. Born Scottsbluff, Neb., Aug. 12, 1926; M.D., Tulane University School of Medicine, New Orleans, La., 1958; interned McLeod Institute, Florence, S. C., one year; surgery residency, West Neb. Gen. Hospital, Cook County Graduate School, 1959-63; elected by Delta Medical Society.

McLeod, James N. Born Chattanooga, Tenn., Sept. 7, 1939; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1965; interned City of Memphis Hospitals, Memphis, Tenn., one year; internal medicine residency, same, 1966-67; internal medicine residency, University Medical Center, Jackson, Miss., 1969-71; elected by Central Medical Society.

Ruff, James Edward II. Born Jackson, Miss., July 14, 1936; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1962; interned San Francisco Gen. Hosp., San Francisco, Cal., one year; internal medicine residency, University Medical Center, Jackson, Miss., 1966-68; psychiatry residency, same, 1968-71; elected by Central Medical Society.

Watkins, Billy Newman. Born Brookhaven, Miss., Nov. 19, 1931; M.D., University of Arkansas School of Medicine, Little Rock, Ark., 1961; interned Confederate Memorial Medical Center, Shreveport, La., one year; elected by Central Medical Society.

Southern Ob-Gyn Seminar Scheduled

The annual Southern Obstetrical and Gynecological Seminar will be held at the Grove Park Inn, Asheville, N. C. July 23-28.

Subjects to be covered include broad fields of obstetrics and gynecology.

For further information, write Dr. George T. Schneider, The Ochsner Clinic, 1514 Jefferson Highway, New Orleans, La. 70121.

DEATHS

BENNETT, TERRY LEE. M.D., Tulane University School of Medicine, New Orleans, La., 1920; interned Matty Hersee Hospital, Meridian, Miss., one year; past secretary and past vice president of East Mississippi Medical Society; member of Fifty Year Club of MSMA; Emeritus member of MSMA and AMA; died May 15, 1972, age 78.

DILLARD, JAMES B. M.D., Meharry Medical College School of Medicine, Nashville, Tenn., 1916; interned same, one year; died May 5, 1972, age 84.

POSTGRADUATE CALENDAR

October 10, 1972
CHEST DISEASE SEMINAR
November 3-4
SURGERY SEMINAR
March 7, 1973
RENAL SEMINAR
April 30-May 3
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

Blind Center Opened at UMC

Dedication ceremonies for the Addie McBryde Rehabilitation Center for the Blind were held in May, co-hosted by the University Medical Center and the State Department of Public Welfare Division for the Blind.

Among those who participated in the dedication were Mississippi Deputy Attorney General Delos H. Burks, Secretary of State Heber Ladner, Edgar J. Stephens, Jr., University of Mississippi Chancellor Porter L. Fortune, State Rehabilitation Division of the Blind Director Jim Carballo and Shelton W. McLelland of the Rehabilitation Services Administration in Atlanta, Ga.

The new four-story facility, an east extension of the Medical Center, offers training for development of personal and social skills to help the blind achieve their vocational potential.

The center has six teaching departments, a psycho-social department, a gymnasium and a dormitory for 36 trainees. In addition, the Medical Center will operate a four-lane eye clinic and a low vision eye clinic on the top floor. The state-owned center is staffed by professionals from the Rehabilitation Division for the Blind, Department of Welfare.

Charles Mathews Appointed MSMA Executive Secretary

Charles L. Mathews of Jackson has been appointed executive secretary of the Mississippi State Medical Association, according to Dr. J. T. Davis of Corinth, chairman of the Board of Trustees.



Mr. Mathews

Mathews, a veteran nine-year employee of MSMA, left his post as associate executive secretary in 1969 to accept a position as staff assistant with the Division of Comprehensive Health Planning under the office of Federal-state programs of the governor.

In 1970 he became deputy director of the newly-created Mississippi Medicaid Commission and served in that capacity until he was appointed acting Commissioner of Public Welfare by Gov. John Bell Williams in 1971.

Mathews, a graduate of Louisiana State University, was named "Mississippi's Outstanding Association Executive" in 1964 by the Mississippi Economic Council.

He is a native of Jackson and served in the Army Security Agency during the Korean War, 1952-55. Mathews is a member of the Mississippi Society of Association Executives, American Society of Association Executives, Public Relations Association of Mississippi, and Jackson Junior Chamber of Commerce.

Other association personnel changes announced by the Board of Trustees include the resignation of Mr. Hilton C. Bowers as director of the Division of Medical Care Plans to accept a position with the Mississippi Baptist Hospital. Mr. Sidney A. Smith, director of Division of Medical Services, will assume Mr. Bowers' position.


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Write your delegates, call them, see them. If they aren't responsive, tell them they'll be hearing from you at election time.

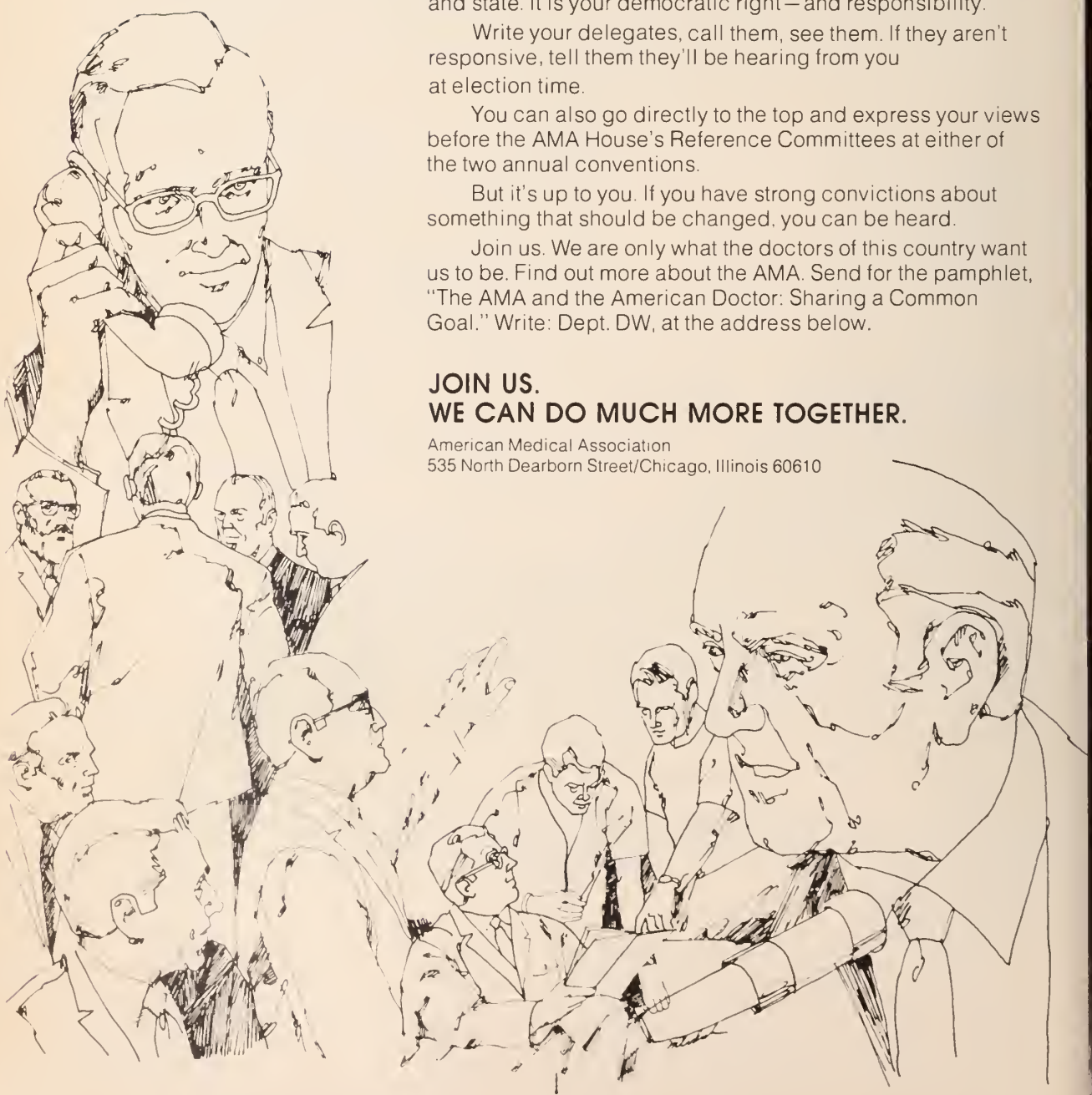
You can also go directly to the top and express your views before the AMA House's Reference Committees at either of the two annual conventions.

But it's up to you. If you have strong convictions about something that should be changed, you can be heard.

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535 North Dearborn Street/Chicago, Illinois 60610



Book Reviews

Biochemical Profiling in Diagnostic Medicine. By Joseph A. Preston, M.D., and David B. Troxel, M.D. 51 pages with illustrations. Tarrytown, N. Y.: Technicon Instruments Corporation, 1971. $2.50 for set of five.

"Biochemical profiles" have become familiar to most physicians in recent years, partly because of widespread usage of the SMA 12/60 analyzer. This short monograph of only 51 pages includes eight pages outlining the tests available, the normals of each test, and an outline of differential diagnoses to be considered when each test is abnormal. This is a comprehensive list, and physicians will find it of help and interest.

The remainder of the monograph shows actual profiles on each page outlining both normal and abnormal patterns. The abnormal patterns are subdivided into hepatic disease, calcium-phosphorus disorders, other metabolic disorders, cardiovascular-pulmonary-renal disease patterns, and hematologic disorder patterns.

This is all the book includes, and I believe the section on differential diagnosis will be of more value than the actual graphs of various disease states.

The monograph will be of interest and value to internists, particularly when confronted with a difficult diagnostic problem.

WILLIAM E. WEEMS, M.D., Laurel, Miss.

Organ Physiology: Structure and Function of the Nervous System. First Edition. By Arthur C. Guyton, M.D. 254 pages with 204 illustrations. Philadelphia: W. B. Saunders Company, 1972. $7.00.

This softback monograph is almost entirely taken from the parent Textbook of Medical Physiology by Guyton except for the addition of further information on the reticular activating system, memory, and the Limbic system. In addition, Netter-type colored plates at the beginning of the text aid greatly in visual recognition of anatomic structures for the student without knowledge of human neuroanatomy.

Each of the 20 chapters are followed by appropriate references, all of which reflect the recent increased knowledge concerning the human nervous system. The index is well organized and thorough including such interesting topics as "itch" and "tickling."

Appropriately of the 20 chapters, three are devoted to the visual system which comprises a major portion of the human nervous system. The text is filled with drawings, graphs, formuli, and charts which well illustrate the written material. Interesting electron micrographs of skeletal muscle fibers are also included.

Many of the more complex aspects of the nervous system such as action potentials, synaptic transmission and inhibition, and skeletal muscle contraction are made relatively clear even for those not well versed in neurochemistry. Appropriately, comparison to the computer sciences is made by the use of such terms as feedback, servomechanism, and reverberating circuits.

Many of the more common clinical pathologic states are brought into context, making the text even more useful to the medical student and clinician. Discussion of how color vision occurs and perception of light intensity as well as memory engrams and abstract thought processes make the text present exactly what the author hoped to achieve, that is "the beauty and logic intrinsic in the design of the nervous system—the automaticity of such feats as walking, sleeping, waking, and even search for food; the inbred pace-setting of emotions; and the almost magic processes for channeling, storing, and deciphering information."

If one is interested in structure and function of the nervous system, one cannot find a better, more up-to-date, or more economical text.

A. C. TIPTON, M.D., Jackson, Miss.

Dr. Tatum Is Cardiology Fellow

Dr. Jetson P. Tatum of Meridian has been granted Fellowship in the American College of Cardiology (ACC), the national medical society for specialists in cardiovascular diseases. The Mississippi physician is among a group of 193 from United States and Canada recently admitted to the College's highest membership classification.

Dr. Tatum, as well as the other new Fellows, has fulfilled stringent membership requirements based on several years of practice and specialty certification. This effort, according to Dr. Patrick H. Lehan of Jackson, the ACC Governor for Mississippi, culminates in his being considered by colleagues in his community as specialist or consultant in cardiovascular diseases.

Methodist Rehab Center Began

Construction on the proposed $5,000,000 Methodist Rehabilitation Center, located on the southeast corner of the University Medical Center complex in Jackson, began in May. Completion date is set in 18-20 months.

The first such facility in the state, the rehabilitation center will provide rehabilitation services to help Mississippians return to productive lives. The 60-bed hospital, together with a large outpatient clinic, will offer among its services medical and social aid, treatment, physical and occupational therapy, guidance and counseling.

Co-sponsors are the Methodist Mississippi Hospital and Rehabilitation Center, Inc., the Vocational Rehabilitation Division of the State Department of Education, and the University Medical Center.

The rehabilitation center will be built with $4,000,000 in vocational rehabilitation funds and $1,000,000 in matching Methodist support.

Ole Miss Alumni Leaders Meet



Ole Miss alumni leaders discuss future plans at annual alumni gathering. From left are Mr. Charles D. Fair, president of the Ole Miss Alumni Association; Dr. Bobby F. King of Iuka, medical alumni president; Dr. J. Daniel Mitchell of Jackson, medical alumni immediate past president; Chancellor Porter Fortune of the University; and Dr. Robert E. Blount, dean and director of the University Medical Center in Jackson.

Dr. Lotterhos Joins Georgia Faculty

Dr. William E. Lotterhos of Jackson, former speaker of the MSMA House of Delegates, has accepted an appointment as chairman of the new department of family medicine at the Medical College of Georgia.



Dr. Lotterhos

Dr. Lotterhos will lead development of a department at MCG that will eventually consist of five full-time family practitioners, five part-time specialists, and supportive staff.

He will also work in establishing a model family practice center which will provide the operational base for a three year residency program in the specialty.

A diplomate of the American Board of Family Practice, Dr. Lotterhos is a former chairman of the board and president of the American Academy of Family Physicians.

Prior to recognition of family practice as a specialty, Dr. Lotterhos was chairman of the AMA Section on General Practice.

Dr. Lotterhos was a key member of the AMA and American Association of Medical Colleges committees that helped set up family practice as a new specialty, and has been very active in promoting the specialty and in helping medical schools and teaching hospitals to start programs in family practice.

He served as Speaker of the MSMA House from 1968-1972 and has been on the clinical faculty of the University of Mississippi School of Medicine.

Dr. Lotterhos has served in many positions of responsibility in medical organization including membership on the AMA Council on Scientific Assembly and the state Comprehensive Health Planning Council.

Buy Savings Bonds

St. Dominic-Jackson Memorial Hospital Nears Completion of $17 Million Program

St. Dominic-Jackson Memorial Hospital did a total turnaround in the spring, facing now into the southern sun and up to ascending responsibilities of health care. The total $17 million expansion program, now in its final phase, is aimed at a target of community service with patient care in the bull's-eye.

St. Dominic's forged a chain of firsts in its move. It is the first hospital in the state to provide completely automated materials handling and the first with Allander clean air curtains in surgery. Only half a dozen hospitals in the nation claim such facilities.

It has the newest Pho/Gamma Scintillation camera in the state and a fully automated fire alarm system. Medication is dispensed from a mobile formulary cart with a separate drawer for each patient's unit doses.

Just as vital to health care, if less suitable for public display, are means of dealing with dirty linen and waste disposal. The new hospital has a Somat (system of masceration and transportation) ecology conscious waste system which pulverizes and transports in a completely enclosed stream of running water. Waste volume is reduced by one tenth. After water is removed, waste pulp will be used in sanitary land fill. Pathological waste is consumed by a new incinerator which literally burns its own smoke.



Figure 1. St. Dominic's new wing is shown. This is now the main entrance and lobby for visitors.



Figure 2. In this view from I-55, the new south wing is on far left. Between wings are the laundry (darker building) and the four-story services building which houses central processing, labor and delivery suites, surgery suites. In front of the north wing is the three-level parking garage and new Jackson Medical Offices which are under construction.

Modern laundry equipment is now handling a million pounds of hospital linen per year.

But working capacity for health care is the soul of St. Dominic's new look. In the new patient rooms the lighting, air handling, and communications system, electrically-controlled beds and even

plumbing are selected for the primary well-being of the patient.

On April 29, the move was made to St. Dominic's new south wing. Then began total renovation of the former facilities which will bring the north wing up to the same standard of patient care as the new part.

By the end of 1972, St. Dominic's Hospital completed will be 400 beds, double its present size and the largest private hospital in the state. The south wing and the north part, which was built in 1954, are essentially the same size with 200 beds each. Only the south wing is now in use as the north is being remodeled.

All service areas are being doubled to take care of the big new hospital. Additional parking lots have been completed and a three-level parking garage is under construction in the Jackson Medical Offices building going up on the north lawn. It will provide office space for 60 staff doctors on five floors and will be ready for occupancy by Dec. 1.

The hospital's north entrance will then be the permanent admitting lobby for incoming patients. A walkway between the office building and the admitting entrance will be under roof. The south entrance has already become the main lobby for visitors.

Gearing up for better patient service has involved inservice training of 500 employees in the use of new equipment. Joe Wright, materials management counselor from Dallas, Tex., has taught 22 inservice training courses.



Figure 3. From left, the wall panel is the source of electric power, oxygen, suction, the intercom system. Lorriane Fluitt, inservice director, holds pillow speaker which also is nurse call and tv control. Jo Little, assistant director, adjusts electrically controlled bed as Sister Trinita, director of nursing service, observes. Drapes are cotton, made flat for hospital laundry and are hung on a jiffy-join rod.

Employees all majored in the use of Amscars, the self-propelled robots which carry "the right thing to the right place at the right time for the best patient care," in the words of Sister Josephine Therese, administrator.

Cars are employed to carry dietary trays, linens, medication, and all kinds of supplies to each floor quickly, quietly, and economically. Cars have their own elevators and guidepaths under the floor in their own corridors.

Electronics have improved hospital communications, too. St. Dominic's new patient rooms have an intercom unit which puts the patient in voice contact with the nurses station. The call button on the pillow gives the nurse a visual (light) signal both at the station and over the patient's door.



Figure 4. Inservice training was conducted in the use of all the new equipment in St. Dominic's new south wing and all 500 employees majored in the use of the self-propelled cars which automate materials handling. The Amscars have their own elevators and guidepaths under the corridor floors.

Every patient has a self-dialing princess telephone at the bedside and a pillow speaker for remote control of the wall-mounted tv. Closed circuit television is used for in-hospital information programming.

Each room has its own thermostat, furnishing either fresh heated or cooled air to suit the patient, who dials the temperature he prefers.

Visitors are controlled through the pass system —one family pass for use any time and two visitor passes good only during visiting hours. The system is structured to protect the patient from the exhausting necessity of entertaining guests while hospitalized and to prevent interference with nursing care.

The new hospital beds are the retracting kind with electrical adjustments for height, head, knee, and foot elevations. There is a built-in wardrobe

and a bath in each room, as well as lavatory near the hall door for physicians and nurses to wash as they leave.

On the wall panel is located, all in one place, the oxygen and suction outlets, electrical outlet, auxiliary power outlet, and intercom.

There will be no more venetian blinds to present housekeeping problems in the new St. Dominic's. Flat cotton draperies go through the big institution ironer. They are topped with tape which threads into a simple grooved metal strip.

Textured vinyl covers all walls, and floors are terrazzo except on sixth—the psychiatric section, which is carpeted.

The new ophthalmology service contains an examination room with all the sophisticated equipment which the specialist has in his own office, the gift of Mrs. Luther Manship.

When the hospital is completed, a "Teen Lane" will be available for adolescent patients. Respiration therapy and physical therapy, now in temporary quarters, will be greatly expanded. A post-ICU-CCU unit will provide remote monitoring by telemetry.

Clinical labs already are occupying their new space, and so is radiology, although more space will be reserved for nuclear medicine after remodeling. An electroencephalogram laboratory is under construction with advanced equipment for reading brain waves on order. Total renovation of the emergency room is still to come.

The Amscar system of materials handling is at the heart of an overall new program of materials management, carefully designed for greater efficiency and lower cost. The initial $650,000 for installation will pay for itself, the administration believes.

The system includes 18 base cars and 72 modules which can be removed at the nursing floor so the base is returned to central processing to carry another load.

The Amscar system has separate receiving and sending areas on opposite sides of its own elevators so that soiled items are kept completely apart from clean items being delivered. Now none of the materials, coming or going, ever get into service elevators, work areas, or visitor corridors.

The Amscar control is located in central processing which dispatches deliveries to the floors. Cars may be operated manually with the handle on the front.

Two Allander air curtains are installed in St. Dominic's OR for use when risk of infection is great, especially during long operating procedures or those involving large wounds. Total hip replacements will be done in those operating rooms with the air curtains.

The Allander principle sends air from ceiling filters, sweeping down through the operating field and out an exhaust below, with a change of surgically clean air twice every minute. It's a slow-moving air mass, the administrator explains, involving no draft. Surgeons also will be provided with special gowns which employ the clean air principle inside the garment itself. The gown is hooked up to the exhaust which maintains negative pressure inside the garment and removes exhaled air.

The new scanner camera is equipped with a Nikon accessory for permanent photographic records. The new fire alarm is activated by a smoke detector in the hall ceiling on each patient floor, automatically cuts off oxygen and locks certain crucial doors.

The entire expansion and renovation project is scheduled for completion during the calendar year of 1972. At that time, St. Dominic's will have formal dedication and tours for the public.

UMC Graduates 80 Physicians



Eighty candidates received the Doctor of Medicine degree at the University of Mississippi Medical Center Commencement exercises on May 28. The largest class in the School of Medicine's history counted among its members the 1,000th medical graduate this year. Graduation principals included, from left, Dr. John A. D. Cooper, Association of American Medical Colleges president and Commencement speaker; Dr. Robert E. Blount, Medical Center director and medical school dean; Chancellor Porter L. Fortune, and Dr. Mac Andrew Gregory, top medical graduate and recipient of the Walter S. Leathers Award. Some 130 candidates got degrees at the 16th annual Commencement.

Clarksdale Society Names Officers

The Clarksdale and Six Counties Medical Society has announced its officers for the year. President is Dr. Julius L. Levy, Sr., of Clarksdale. Dr. Melvin Ehrich is president-elect, and Dr. Glenn L. Wegener is secretary-treasurer. both of Clarksdale.

The executive committee is composed of Drs. Whitman B. Johnson, Jr., of Clarksdale, Coahoma County; Marshall Lynch of Marks, Quitman County; T. T. Lewis of Charleston, Tallahatchie County; and T. K. Chandler of Tunica, Tunica County.

Members of the board of censors are Drs. George Furr. Steve C. Leist, and Robert McGee, all of Clarksdale.

Kidney Foundation Advisors Honored

Members of the medical advisory board of the Kidney Foundation of Mississippi were honored at the seventh annual meeting of the foundation.

Each member was awarded a certificate of appreciation thanking him for his dedicated efforts in support of the goals of the kidney foundation.

Those honored included Drs. Temple Ainsworth, Ben B. Johnson, Roger B. Arhelger, Joel L. Alvis, John D. Bower, James R. Cavett, Jr., Herbert G. Langford, Jose Montalvo, George V. Smith, W. Lamar Weems, all of Jackson, and Charles E. Sledge of Whitfield.

Others are Drs. John P. Elliott, Jr., of Tupelo, Sidney O. Graves of Natchez, Robert M. Graham of Meridian, Leon Lenoir of Greenville, George W. Vickery of Gulfport, Cecil T. Williams of Laurel, and Howard A. Nelson of Greenwood.

The advisory board was founded in 1966 by Dr. Ainsworth who served as its first chairman and is now the honorary chairman. Dr. Ben Johnson is currently chairman of the board.

The functions of the board include approval of expenditure of funds for medical and scientific purposes, formulation and establishment of principles of a scientific or medical nature, and principles relative to the education of the professional community and to the dissemination of information to the public.

Family Practice Program Anticipated

A family practice department will get underway at the University Medical Center as soon as faculty can be assembled.

Medical Center director Dr. Robert E. Blount made the announcement following the regular May meeting of the Board of Trustees, Mississippi Institutions of Higher Learning.

"Increased funds for the medical school and teaching hospital, approved in the 1972 legislative session, made this important step possible," the Medical Center director said. "We hope to have accreditation approval for an academically-excellent family practice residency program by July, 1973."

Dr. Oakes Named Physician of the Year

Dr. William T. Oakes of Amory received the award of "Physician of the Year" from the Mississippi Society of the American Association of Medical Assistants at their recent state meeting on the Gulf Coast. This recognition is given each year in acknowledgement of outstanding contribution to the organization.

He served this past year as a member of the physician advisory board of both the Mississippi Society, AAMA, and the northeast chapter, AAMA, MS, and has been re-elected to serve an additional term.

A native Mississippian, Dr. Oakes attended Mississippi State University, Emory University, the University of Mississippi Medical School, and the Medical College of Alabama, receiving his M.D. from the latter in 1952. He served an internship at Carroway Methodist Hospital, Birmingham, Ala. At the present time he is in the private practice of medicine in Amory.

He is a member of AMA, Mississippi State Medical Association, American Academy of Family Physicians, and the Mississippi Academy of General Practice. During his years of training he was a member of Sigma Phi Epsilon, the Blue Key, Alpha Epsilon Delta, Beta Beta Beta, and Phi Chi.

Dr. Oakes has served the community as a district lay leader of the United Methodist Church, a member of the Choctaw County School Board, and president of the Amory PTA. He teaches a course in coronary intensive care at the Gilmore Memorial Hospital and a class in medical terminology for the northeast chapter, AAMA, MS.

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Index to Advertisers

American Medical Association 4, 316B
Arch Laboratories 11
Beecham-Massengill Pharmaceuticals 308D
Burroughs Wellcome 8, 312A
Dow Pharmaceuticals 10B
Geigy Pharmaceuticals 10A
Hill Crest Hospital 10
Kay Surgical, Inc. 19
Eli Lilly and Company front cover, 18
Merck, Sharp and Dohme 6, 7
Pharmaceutical Manufacturers Association 308A, 308B, 308C
Wm. P. Poythress and Co. 12
Roche Laboratories second cover, 3, fourth cover
Julius Schmid, Inc. 16, 17
G. D. Searle and Co. 296B, 296C
Smith, Kline and French 296D
Stuart Pharmaceuticals 296A
The Upjohn Company 14, 15, 312B, 312C, 312D
Winthrop Labs 316A
Woodward Academy 19
Thomas Yates and Company third cover

IN CONCLUSION

FDA has announced final order requiring safety packaging for liquid furniture polishes containing 10% or more of petroleum distillates. Action was taken to protect children under five years old from accidental ingestion and aspiration of low viscosity petroleum distillat polishes, which result in chemical pneumonitis. Safety standards re quire 85% closure effectiveness in test group. Packaging must resti flow of liquid to no more than 2 ml of contents from opened containe

All women 21 years of age or older are now required to have a Pap smear test upon admission to hospitals in New York state. Requirement is imposed by amendment to state hospital code enacted by N.Y. Hospital Review and Planning Council. Previously, test was required only for women aged 25-54. Patient may be excused from test, howeve if medically contraindicated or if Pap smear has been performed in 3 years prior to admission.

A special Wisconsin governor-appointed task force on health planning and policy has said it will recommend formation of Wisconsin Health Care Authority to control placement and expansion of health care institutions and services, review rates charged by institutions and professional staffs, set standards for institutional licensing. Tas force chairman David Carley said care delivery in state is archaic, leads to inequities in treatment and is unresponsible to public need

152 physicians have received assignments to National Health Service Corps, announced Dr. Merlin K. DuVal, HEW assistant secretary for health and scientific affairs. Most of the 288 PHS personnel assign to 122 communities having serious health manpower shortages will ser in rural areas. Physicians in the program will receive annual salaries of $12,000 to 15,000 and will be exempt from draft while in pro gram. Dr. H. McDonald Rimple has been appointed director of the cor

American Hospital Association preliminary study found that a majorit of hospitals would have to raise charges to private non-governmental patients to meet HEW proposal that hospitals receiving Hill-Burton funds give specific percentage of charity care, reports AHA News. Survey, done through state hospital associations, drew responses fro 357 hospitals in U.S. and disclosed that few are meeting proposed re quirement, according to accounting principles currently used.

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therap

Dosage: Individualize for maximu beneficial effect. *Adults:* Tension, anxie and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.c or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

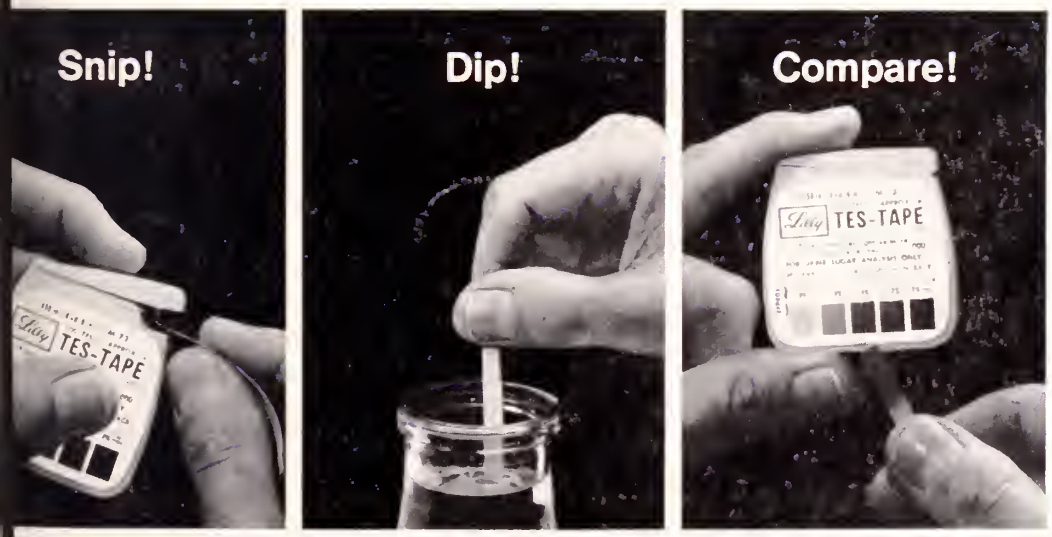
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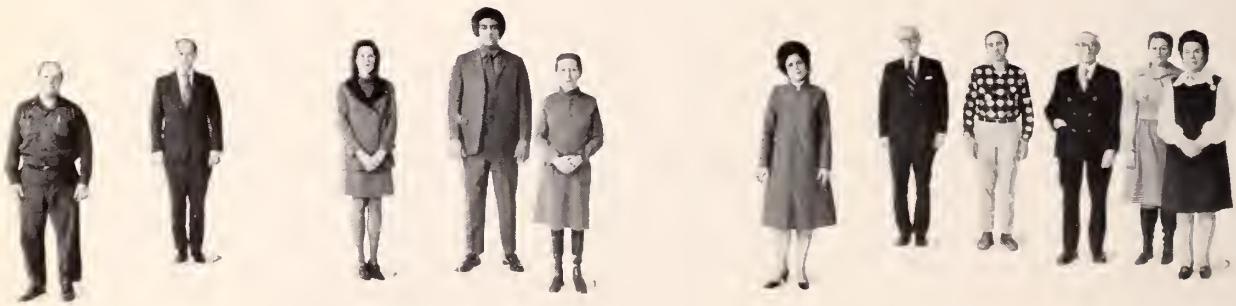




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Most people can handle this tension.



Some people develop excessive psychic tension and need your counse



and a few may need counseling
and the psychotropic action of Valium® (diazepam).

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While Valium can be a most elpful adjunct to your counseling, should be prescribed only as long s excessive psychic tension per- sts and should be discontinued hen you decide it has accom- lished its therapeutic task. In eneral, when dosage guidelines re followed, Valium is well lerated (see Dosage). For con- enience it is available in 2-mg, 5-mg nd 10-mg tablets.

Drowsiness, fatigue and ataxia ave been the most commonly re- orted side effects.

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Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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CONTENTS

ORIGINAL PAPER

Total Hip Replacement Operation, Biomaterials and Indications **323** Paul S. Derian, M.D., George Truett, M.D., and Fred M. Massey, M.D., Jackson, Mississippi

SPECIAL ARTICLES

Radiologic Seminar CXIX: Diaphragmatic Hernia: A Cause of Respiratory Distress in the Newborn **330** Paul H. Moore, M.D., Pascagoula, Mississippi

The Mississippi Foundation for Medical Care **332** J. T. Davis, M.D., Corinth, Mississippi

Proceedings of the House of Delegates, 104th Annual Session **335** Annual Publication

EDITORIALS

Parathyroid Adenoma Recognition Through SMA-12 Screening **359** George H. Martin, M.D., Vicksburg, Mississippi

The Population Dilemma **360** W. Moncure Dabney, M.D., Crystal Springs, Mississippi

THIS MONTH

The President Speaking **358** 'Professional Standards Review Organizations (P.S.R.O.)'

Medical Organization **367** Mississippi Academy of Family Physicians Elects Officers, Holds Annual Meeting

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phenformin is prescribed in combination with Orinase, ap- riate package literature should be consulted.

dverse Reactions: Severe hypoglycemia, though uncommon, occur and may mimic acute neurologic disorders such as bral thrombosis. Certain factors such as hepatic and renal ase, malnutrition, advanced age, alcohol ingestion, and nal and pituitary insufficiency may predispose to hypogly- ia and certain drugs such as insulin, phenformin, sulfona- es, oxyphenbutazone, salicylates, probenecid, monamine ase inhibitors, phenylbutazone, bishydroxycoumarin, and nyramidol may prolong or enhance the action of Orinase and ease risk of hypoglycemia. Orinase long-term therapy has n reported to cause reduction in RAI uptake without pro- ducing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity re- actions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

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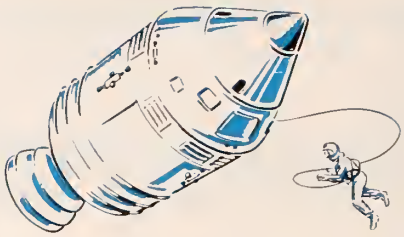
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NEWSLETTER

August 1972

ear Doctor:

ississippi Regional Medical Program has approved awards totaling ver $42,000 to 8 contract proposals submitted by various agencies nd individuals. Funds were made available to the program through he use of unspent monies from existing projects, continuation dol- ars from projects being phased from MRMP support and as a result f the revised budget ceiling granted to the region by RMP.

Grantees are: Mercy Hospital, Vicksburg; Hinds Mental Health Center; Central Miss. Health Planning Council; Training Program for Black Med Students; MSBH sickle sell study; Tyler Holmes Memorial Hospital, Winona; Ole Miss medical continuing education; and Jackson Seminar on Death and Dying Patients.

ncreased experience with abortion procedure leads to greater acceptance of abortions by health care professionals, reports American ospital Association Journal. Leadership was most important factor n determining professional staff attitudes. Religious beliefs and nvolvement with unwanted pregnancies are also influences.

MA and National Board of Medical Examiners are undertaking a new ational project leading to certification of physicians' assistants. bjective of project is to determine best way of developing nationally alidated certifying examinations that will ensure orderly development f concept of assistant to the primary care physician.

hysicians' fees increased 1.37% during first 9 months of Economic tabilization Program while overall Consumer Price Index rose 2.05% uring same period, according to AMA news. Physicians' Fee Index is component of the All Services Index of CPI which rose 2.16% from ept. 1971 to May 1972 compared to 3.03% the previous 9 months.

DA announced seizure of two Diapulse devices and enjoined Diapulse rp of America from shipping or selling its products in interstate mmerce. Courts now support FDA's contention that on the basis of b and clinical tests there are no known therapeutic benefits to derived from use of Diapulse. Other seizure actions are planned.

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor

SSA Publishes Medical Care Spending Report

The average medical bill for a person 65 or older in fiscal year 1971 was $861, compared to $140 for a youth under 19, and $323 for a person between 19 and 64 years of age.

Public funds, mainly Medicare and Medicaid, covered two-thirds of the medical expenses of the aged, according to a report, "Medical Care Spending for Three Age Groups," in a recent issue of the *Social Security Bulletin*. An older person's out-of-pocket expenditure for health care dropped from more than one-half of his medical bill in 1966 (before Medicare and Medicaid) to about one-fourth of the total bill in 1971.

Because of higher prices and the increased use of services, however, the dollar amount they paid directly in 1971 was only slightly lower than in 1966—$225 in 1971, compared to $234 in 1966.

Hospital care constituted the largest health expenditure item for all but the very young and was by far the largest expense item for the group aged 65 and over, accounting for approximately $8.5 billion of the total health expenditures of $17.9 billion.

Medicare paid 61.6 per cent of the hospital expenses of the aged in 1971 and over 62 per cent of the $3.0 billion spent for physicians' services to senior citizens.

The aged who make up only 10 per cent of U. S. population, the report notes, accounted for a one-fourth share of health expenditures of the national total of $65.1 billion spent for personal health care in 1971—because of their greater use of medical care services and their costlier illnesses. The average aged person is twice as likely to suffer from one or more chronic conditions than a younger person, is much more likely to be limited in activity, is admitted to hospitals much more frequently and stays longer, and uses physicians' services to a greater extent.

As a consequence of the Medicare and Medicaid programs, government has become the main source of funds for the health care services received by the aged. All the Medicare expenditures and almost half the Medicaid expenses are for persons aged 65 or over. Together these programs were responsible for 87 per cent of the $12.1 billion in public funds spent for health care for the aged in 1971.

Only 23 per cent of the $36.8 billion personal health care expenditures for persons in the 19 to 64 age group came from public sources; of those for the under-19 age group, payment of 27 per cent came from public sources.

Gantrisin® (sulfisoxazole) Roche® provide your patients with many important advantages:

- high urinary levels
- generally good tolerance
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- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

Before prescribing, please consult complete produc mation, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tr fections (primarily cystitis, pyelitis, pyelonephriti to susceptible organisms (usually *E. coli, Kle Aerobacter, Staphylococcus aureus, Proteus mi* and, less frequently, *Proteus vulgaris*) in the abse obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivit are not always reliable. The test must be carefully nated with bacteriologic and clinical response. Wh patient is already taking sulfonamides, follow-up c should have aminobenzoic acid added to the culture

Currently, the increasing frequency of resistant org is a limitation of the usefulness of antibacterial age cluding the sulfonamides, especially in the treatm chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measurec tients receiving sulfonamides for serious infection there may be wide variations with identical doses; a 100 ml should be maximum total sulfonamide le adverse reactions occur more frequently above thi

Contraindications: Hypersensitivity to sulfonamid fants less than 2 months of age (except adjunctive pyrimethamine in congenital toxoplasmosis), preg at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* h been established. Sulfonamides will not eradicate A streptococci. Deaths associated with sulfonami ministration have been reported from hypersen reactions, agranulocytosis, aplastic anemia and blood dyscrasias. Clinical signs such as sore throat, pallor, purpura or jaundice may be early indicati serious blood disorders. Complete blood count urinalyses with careful microscopic examination be performed frequently during sulfonamide thera

Precautions: Use with caution when impaired re hepatic function, severe allergy or bronchial asth present. In glucose-6-phosphate dehydrogenase-de individuals, hemolysis (frequently a dose-related tion) may occur. Maintain adequate fluid intake t vent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranuloc aplastic anemia, thrombocytopenia, leukopenia, lytic anemia, purpura, hypoprothrombinemia, met globinemia. *Allergic reactions:* Erythema multiform vens-Johnson syndrome), generalized skin eru epidermal necrolysis, urticaria, serum sickness, pr exfoliative dermatitis, anaphylactoid reactions, pe tal edema, conjunctival and scleral injection, photo tization, arthralgia, allergic myocarditis. *Gastroint reactions:* Nausea, emesis, abdominal pains, he diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. tions:* Headache, peripheral neuritis, mental depre convulsions, ataxia, hallucinations, tinnitus, verti somnia. *Miscellaneous reactions:* Drug fever, chills nephrosis with oliguria and anuria. Periarteritis r and L.E. phenomenon have occurred with sulfon therapy. Sulfonamides bear certain chemical simil to some goitrogens, diuretics and oral hypogly agents. Goiter production, diuresis and hypogly have occurred rarely in patients receiving sulfona Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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acute, recurrent or chronic nonobstructed cystitis

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3.

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5.

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Gantrisin's rapid excretion rate is another reason why it is generally well tolerated. Over 50% of a single oral dose is excreted in 8 hours, over 90% in 24 to 48 hours, so there is little risk of hematuria or crystalluria, and anuria is rare. As with all sulfonamides, adequate fluid intake must be maintained. Complete blood counts and urinalyses, with careful microscopic examination, should be performed frequently.

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New Student Aid Program Announced

The Robert Wood Johnson Foundation has announced a four-year $10 million student-aid program to increase the number of future doctors likely to enter practice in medically underserved areas.

Under the program, all the nation's 108 schools of medicine and 7 schools of osteopathy will receive four-year grants for use as scholarship and loan awards to women students, students from rural backgrounds, and those from the country's black, Indian, Mexican-American, and U. S. mainland Puerto Rican populations.

Dr. David E. Rogers, president of the foundation, said that the plan to focus the grants on these groups of students was based on two main considerations:

—Evidence indicating that student physicians with such background characteristics are the most likely to choose practice locations in underserved areas upon completion of their professional training.

—The decision by the foundation to concentrate on the improvement of access to personal health services as one of its principal goals.

The student-aid grants program is the foundation's first important effort in its transition to a major national philanthrophy in health.

The foundation was established in 1936 by the late General Robert Wood Johnson, who died in 1968, leaving the foundation the bulk of his estate. This bequest was received by the foundation in 1971, bringing its year-end assets to approximately $1.2 billion—and marking its change from a local institution to a national health foundation.

The foundation's program of student-aid grants is intended to help offset the extreme shortage of physicians in rural areas and inner-city communities, and is thus directly related to the foundation's goal of improving access to medical care in American society.

In a letter to the deans of the country's schools of medicine and osteopathy describing the student-aid program, Dr. Rogers said:

"We feel that the current national effort to expand the nation's output of physicians will not adequately cope with the access problem unless the increased number of new graduates includes significant numbers of students with backgrounds that tend to lead them to practice in underserved rural and inner-city communities."

)ATELINE

okes Increase Young People

Los Angeles, Cal. - Increase in number of stroke victims among youth has been noted by LA County-USC Medical Center physicians, who suspect cause drug abuse. Dr. C. Rumbaugh said young people from 15 to 25 have ical stroke symptoms, and x-rays of brain blood vessels have shown ller vessels blocked and deformed. Their admission records show sistent correlation between stroke symptoms and drug use.

ious Cadaver rtage Reported

New York, N.Y. - NY Times reports "serious shortage" of cadavers in medical schools throughout U.S. is "hampering teaching of anatomy" to stuts of medicine and other health occupations. Article said short- is so critical that med schools "are spending large sums to import m other states bodies that have been willed to medical science." fare funeral coverage, transplants and autopsies are causes.

lstone Drug Is ng Studied

Rochester, Minn. - Oral medication that could eliminate surgery as treatment for gallstones is under study by Mayo Clinic research team. Dr. J. L. stle, in describing results with 7 women patients during AMA scienic sessions at San Francisco, said carefully monitored doses of nodeoxycholic acid resulted in disappearance of gallstones in 4 en and decrease in stone size in other 3 after 6-24 months.

t Side of Brain e Easily Hurt

Philadelphia, Pa. - From human brain studies involving schizophrenia, epilepsy, blood vessel abnormalities and mechanical injury, Philadelphia te Hospital researchers concluded left side of brain is more easily ured than right. In report to Federation of American Societies for erimental Biology, they said experiments were conducted with stand EEG of 24 wires on scalp. Brain waves were amplified and recorded.

Analyzes m Charges

Jackson, Miss. - Mississippi Hospital Association has released an analysis of hospital room charges in 68 hospitals comparing Sept. 1970 to June 1972. ures quoted are weighted averages of daily charges. For a private m with bath, the most common charge in 1970 was $29.00; in 1972, .00. Without bath, the charge was $27.00 and is now $27.00. A i-private room was $25.00 and today is $29.00, without bath.

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$40,000 minimum collections guaranteed first year, payable monthly. Not a loan. Need general practitioners, internists, OB/GYNs, anesthesiologists, and orthopedists in many states. Practices available for 1972-73-74. Not an employment agency. No cost to physician to investigate practice. Write or call Sanford Smith, Director of Physician Planning, Hospital Affiliates, Incorporated, P. O. Box 9836, Houston, Texas 77015. 713/453-6324.

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Gastroenterology Course Set for Bermuda

The American Society for Gastrointestinal Endoscopy will present a postgraduate course in clinical gastroenterology Sept. 10-16 at Castle Harbour Hotel, Tucker's Town, Bermuda.

Registration fee for ASGE members is $100.00; for guest nonmembers, $150.00; and for residents or fellows, $75.00.

For further information, contact Dr. Vernon M. Smith, Director, Postgraduate Course, 301 Saint Paul Place, Baltimore, Md. 21202.

Pediatricians Plan Annual Meeting

The American Academy of Pediatrics will hold its 41st annual meeting at the New York Hilton Hotel in New York City, Oct. 14-19.

Scientific papers to be presented during the general sessions include: immunizations—progress and problems, school problems, what the pediatrician should know about atherosclerosis and its prevention, the drop-out, and exciting new developments in pediatrics.

Several pertinent scientific presentations will also be featured during the Academy's specialty section meetings at the annual meeting. Some of the topics to be discussed include: changing roles and relationships in the delivery of child health care; nutrition in the postoperative patient; adolescent life styles—1972 version, and the malignant effects of racism in infancy. The AAP specialty sections are: allergy, anesthesiology, cardiology, child development, community pediatrics, diseases of the chest, military pediatrics, pediatric pharmacology, surgery, and urology.

Other presentations which will round out the annual meeting program include: 24 round tables covering such subjects as failure to thrive, renal disease, seizures, diabetes, health problems in families of migrant workers, education for human sexuality and intensive care units—equipment and monitoring; 12 seminars covering such areas of pediatrics as newborn and premature, infectious diseases and antimicrobials, nutrition, genetics and genetic counseling, psychiatry and child health in rural America; motion pictures; and scientific exhibits.



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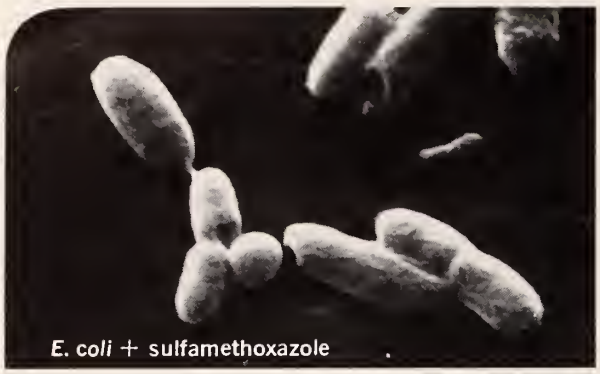
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Encounter under the Scanning Electron Microscope



SEM reveals changes
in *E. coli* exposed to antibacterial agents









Different modes of antibacterial action — Similar changes in morphology

As part of a series of experiments,[1-3] strains of *E. coli* proven susceptible to each antibacterial agent were exposed to 1 MIC of the respective antibacterials for a three-hour period. Included were cell-wall-active drugs, ampicillin and cephalothin; a drug interfering with intracellular protein synthesis, tetracycline; and a chemical agent which acts by interference with para-aminobenzoic acid, sulfamethoxazole.

As seen above, elongation of the bacilli, mid-cell defects and spheroplast-like forms may be appreciated with the SEM technique. These changes in bacterial morphology were similar . . . regardless of the antibacterial agent used and irrespective of its mechanism of action.

"At present, the significance of these observations in clinical infection must be considered with caution, but it is hoped that these data will stimulate a reevaluation of present concepts of the nature and role of morphological variants of bacteria exposed to a variety of antibacterial factors."[2]

References:

1. Klainer, A. S.; Fass, R. J., and Perkins, R. L.: Scientific Exhibit presented at the 25th American Medical Association Clinical Convention, New Orleans, La., Nov. 28-Dec. 1, 1971.
2. Klainer, A. S., and Perkins, R. L.: *Antimicrob. Agents Chemother.*, *1*:164, 1972.
3. Klainer, A. S.: Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies.

***Note:* Since *in vitro* sulfonamide sensitivity tests are not always reliable, carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent urinary tract infections.**

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently this level.

Contraindications: Sulfonamide hypersensitivity; infant than 2 months of age (except adjunctively with pyrimethan congenital toxoplasmosis); pregnancy at term and during period.

Warnings: Safe use in pregnancy has not been establishe teratogenicity potential has not been thoroughly investigate fonamides will not eradicate or prevent sequelae to group A s coccal infections, *i.e.*, rheumatic fever, glomerulonephritis. from hypersensitivity reactions, agranulocytosis, aplastic and other blood dyscrasias have been reported; early clinica such as sore throat, fever, pallor, purpura or jaundice may i serious blood disorders. Complete blood counts and urinalys careful microscopic examination are recommended frequent ing sulfonamide therapy. Clinical data are insufficient on pro or recurrent therapy in chronic renal diseases of children 6 years.

Encounter in Clinical Practice

Control of primary bacterial offenders

Antibacterial Gantanol® (sulfamethoxazole) controls susceptible strains of *E. coli* and other gram-negative and gram-positive organisms often implicated in acute nonobstructed pyelonephritis and cystitis.

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In from 2 to 3 hours after the initial 2-Gm adult dose, antibacterial levels are present in both the blood and urine.

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Subsequent 1-Gm doses provide up to 12 hours of antibacterial coverage. More severe u.t.i. may require a q. 8 h. dosage regimen. Either schedule provides coverage during the waking and sleeping hours—especially important during hours of sleep when normal urinary retention tends to favor bacterial proliferation.

Also effective in nonobstructed chronic and recurrent u.t.i.

It is not uncommon for the elderly and the debilitated to develop chronic and/or recurrent nonobstructed urinary tract infections such as pyelonephritis and cystitis. Such cases often respond satisfactorily to Gantanol. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent u.t.i.

Your Option: Tablets or Suspension

Either dosage form—the Tablets or the pleasant-tasting, cherry-flavored Suspension—can provide the dependable antibacterial activity necessary to control susceptible nonobstructed cystitis and pyelonephritis. Symptomatic improvement may usually be expected in 24 to 48 hours. The usual precautions with sulfonamide therapy should be observed, including adequate fluid intake. Gantanol (sulfamethoxazole) is generally well tolerated with relative freedom from complications; the most common side effects are nausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examination are recommended.

In nonobstructed cystitis and pyelonephritis due to susceptible organisms

Gantanol®
(sulfamethoxazole)
Basic Therapy

Precautions: Use with caution in patients with impaired renal patic function, severe allergy, bronchial asthma and in glucose-sphate dehydrogenase-deficient individuals. In the latter, dose-d hemolysis may occur. Maintain adequate fluid intake to nt crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic ia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, rothrombinemia and methemoglobinemia; *allergic reactions:* ema multiforme (Stevens-Johnson syndrome), skin eruptions, rmal necrolysis, urticaria, serum sickness, pruritus, exfoliative atitis, anaphylactoid reactions, periorbital edema, conjunctival cleral injection, photosensitization, arthralgia and allergic myo-is; *gastrointestinal reactions:* nausea, emesis, abdominal pains, itis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. re-ns:* headache, peripheral neuritis, mental depression, convul-, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *ellaneous reactions:* drug fever, chills, toxic nephrosis with oli- and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab or teasp.) *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole, Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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Leukemia Society Seeks Grant Requests

Investigators interested in leukemia research may apply now to the Leukemia Society of America, Inc. for financial grants to support their future work.

According to Dr. Joseph H. Burchenal, the voluntary health agency's vice president for Medical and Scientific Affairs, applications for funding must be submitted by Nov. 1, 1972. Approved grants will become effective as of July 1, 1973.

The Society offers three types of funding to individual investigators: scholarships for five-year periods totaling $100,000; special fellowships and fellowships for two years in each category for grants of $31,000 and $19,000 respectively. Funding is not limited to United States citizens and is available to qualified individuals working in other countries.

Application forms may be obtained by writing to the Vice President for Medical and Scientific Affairs, Leukemia Society of America, Inc., 211 East 43rd Street, New York, N. Y. 10017.

Chest Physicians Plan Scientific Assembly

The American College of Chest Physicians will hold its 38th Annual Scientific Assembly Oct. 23-26, 1972, in Denver.

The four-day educational program will feature workshops, symposia, guest lectures, fireside conferences, tutorial sessions and the presentation of 86 scientific papers. Clinic visits to 11 hospitals and teaching centers in Denver have been scheduled for the opening day of the scientific assembly.

In addition, there will be a one-day national seminar for nurses and inhalation therapists on modern methods of managing patients with critical cardiopulmonary problems, and a one-day workshop for physician-authors on scientific writing.

A special tour program has been arranged for wives attending the meeting, and a post-convention group tour for all participants will be available.

Registration fee information and advance registration forms are available from the ACCP offices, 112 East Chestnut Street, Chicago, Ill. 60611.

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"The history of science, and in particular the history of medicine…is… the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

– George Sarton, from "The History of Medicine Versus the History of Art"

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians

13.3%
Yes, it would be useful

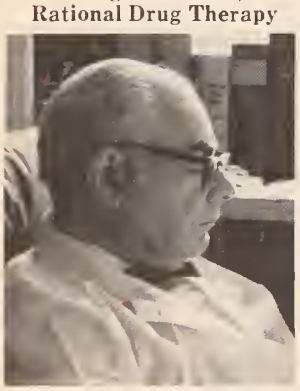
86.7%
No, it would not be useful

Dialogue

Would it be useful in clinical practic to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really determined.

The Bureau of Drugs h suggested the package sert as a possible means communicating informat on relative efficacy of dru to the physician. I find t objectionable, since I not believe the physici should have to rely on t source for final scienti truth. There is also a pra tical objection: Since f physicians actually d pense drugs, they seldo see the package insert. any event, I would mai tain that the physici should know what drug wants and why without d pending on the governme or the manufacturer to t him.

Undoubtedly, physicia are swamped by excessi numbers of drugs in son therapeutic categories. A I am well aware that ma drugs within such cat gories could be eliminat without any loss, or po haps even some profit, the practice of medicin But, in my opinion, neith the FDA nor any oth single group has the expe tise and the wisdom nece sary to determine the o "drug of choice" in a areas of medical practice.

Maker of Medicine

neth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



n my opinion, it is not function of any governt or private regulatory ncy to designate a "drug hoice." This determina- should be made by the sician after he has re- ed full information on properties of a drug, then it will be based on experience with this g and his knowledge of individual patient who eeking treatment.

f an evaluation of com- ative efficacy were to be le, particularly by gov- ment, at the time a new g is being approved for keting, it would be a at disservice to medi- and thus to the patient e consumer. For exam- when a new therapeu- agent is introduced, on basis of limited knowl- e, it may be considered be more potent, more ective, or safer than ducts already on the rket. Conceivably, at s time the new drug ld be labeled "the drug choice." But as addi- ial clinical experience is umulated, new evidence y become available. er, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

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ORIGINAL PAPERS

Total Hip Replacement Operation Biomaterials and Indications

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The authors discuss the biomaterials such as methyl methacrylate, polyethylene acetabular cup and the endoprosthesis of the total hip replacement which has gained acceptance in Europe and America. Five criteria for the low friction arthroplasty are given in addition to a preoperative evaluation of three denominators. Of 32 operations performed at the Medical Center, such disease entities as osteoarthritis, rheumatoid and Marie-Strumpell arthritis, post traumatic osteoarthritis and sickle cell disease have been included. The authors feel that the total hip replacement adds a new dimension to the problems of the hip in the adult.

THE PAINFUL HIP JOINT, reflected in motion and gait limitations, has challenged and frustrated surgeons for centuries. John R. Barton,[1] in 1827, published the first known report of an operative procedure which created a pseudoarthrosis. In the latter half of the 19th century arthroplasty techniques of all sorts were attempted; fascia, skin, muscle and even ivory were used as the interposing membrane. Unfortunately, only limited success was achieved.

During 1923, Smith-Peterson in Boston used glass molded as a cup in 18 operative hip procedures. Due to its fragility and foreign body tissue reaction, the glass arthroplasty did not achieve any lasting success. It was soon abandoned and newer materials were sought. The glass mold evolved finally to a metal prosthesis; at first, stainless steel and then metal alloys.

From 1938 until 1958 thousands of cup arthroplasties were performed throughout the world Although vitallium or stainless steel mold arthroplasty enjoyed success in many centers and by individual orthopaedic surgeons, a need to improve the end results was obvious.

Mr. John Charnley, surgeon and director of the Center for Hip Surgery in Wrightington Hospital —Near—Wigan, Lancashire, England, began the technique of the low friction arthroplasty in 1958.

His use of methyl methacrylate, osteotomy and wire replacement of the greater trochanter, the high density polyethylene acetabular cup and the stainless steel femoral prostheses has been adopted on a world-wide basis.

From the Department of Orthopaedic Surgery, University of Mississippi Medical Center, Jackson.

Dr. M. E. Muller, a Swiss orthopaedist, subsequently modified Charnley's technique by increasing the size of the femoral head from 22 to 32 mm, not osteotomizing the greater trochanter and introducing a polyethylene cup with its inner lumen being canted. Once the techniques and results of Charnley's and Muller's procedures became known, modifications of their concepts were introduced.

This report will present some further aspects of the total hip replacement.

BIOMATERIALS

There are three major components of the biomaterials when the total hip operative procedure is done. These are the methyl methacrylate, the high density polyethylene cup (HDPC) and the femoral head prosthesis (FHP).

Methyl methacrylate (CH2) C (CH3) COO (CH3), is a white finely granular powder (see Figure 1). When mixed with a monomer or liquid, a doughy-like-mass is produced. The usual mixture is 40 gm of powder to 20 mls of the liquid. At first the mixture is coarse and lumpy. After continual stirring with a sterile stainless steel spoon or tongue depressor, a dull gelatinous material is produced. After 2 to 3 minutes of mixing, it is kneaded by the surgeon. Within 5 to 7 min-

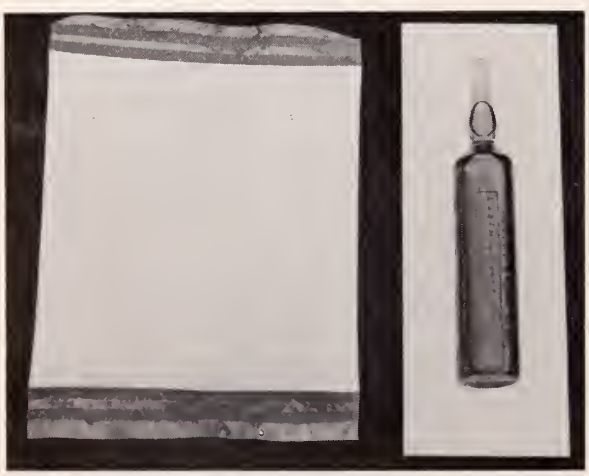


Figure 1. The methacrylate and monomer are packaged as separate units; 40 gm of powder to 20 ml of the liquid.

utes, an exothermic reaction occurs at the moment of polymerization. In vitro, the rise of degrees can be from room temperature to approximately 140-150 degrees F. Fortunately, in vivo, the temperature rise is less and may reach 110-115 degrees F. Although there is some normal expansion of the cement at the time of polymerization it is clinically negligible and does not affect the strength of the metacrylate.

At the present time we are using Surgical Simplex P—radiopaque manufactured by the North Hill Plastics Company of London. It is now available through Howmedia Inc. in the United States. Within the packet of powder is barium sulfate which provides some degree of radiopacity. Thus, the surgeon can see the extent of distribution of the methyl methacrylate in a postoperative roentgenogram. To the monomer has been added hydroquinone which prevents premature polymerization

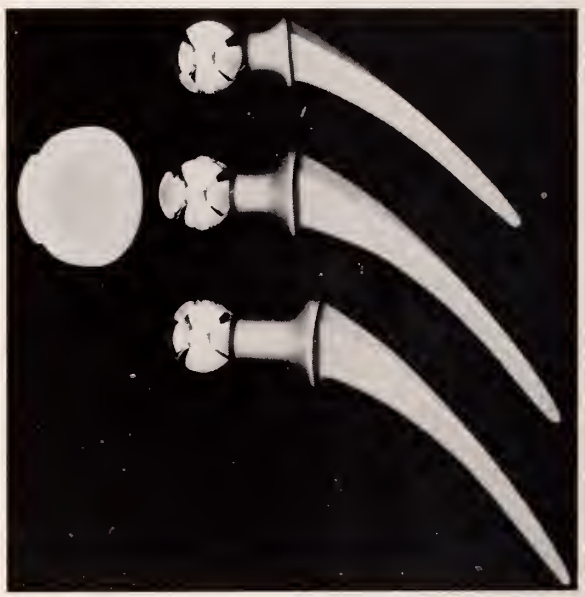


Figure 2. The standard polyethylene cup and femoral head prostheses of three neck lengths: short, medium and long.

and N, N-dimethyl-p-toluidine aiding in cold curing of the cement.

Certain immediate complications have been reported in the use of methyl methacrylate. These have been: (1) transitory fall in blood pressure; (2) pulmonary embolization; (3) systemic hyperthermia at the time of surgery. All the above are believed to be due to the extremely volatile monomer. It is felt by the authors that if sufficient time is allowed for the monomer to thoroughly mix with the powder, the absorption of the volatile monomer will be less and the complications described can be reduced. In our series of 32 patients, we have had no problems during the operative course in the use of the methyl methacrylate. The authors feel that methyl methacrylate is a toxic substance, but so far no reports of any long term problems in patients such as hepatotoxicity have been reported.

Three investigators from Ohio State, Mallory, Stone and Pierre, in a paper presented to the American Academy of Orthopaedics during January, 1972, reported liver damage in mice. The etiology suggested was absorption of the monomer causing fatty degeneration of the liver. It is obvious from this unpublished report that careful studies will have to be made to lessen the concentration of the monomer. We advise preoperative liver studies as a baseline and that the methyl methacrylate not be inserted into the hip joint until the mixture is thoroughly kneaded to lessen its systemic absorption.

The high density polyethylene cup (HDPC) has a low coefficient of friction and also a high tissue tolerance. The HDPC was designed to absorb impact during the weightbearing process and to be highly resistant to fatigue fractures. The HDPC has a density of approximately 0.94 gm per cubic cm and an approximate molecular weight of 1 million allowing for less damage. The Charnley-Muller acetabular cup is manufactured in 2 sizes when one measures the outside diameter; (1) 50 mm which is used in approximately 90 per cent of the operative procedures and (2) 44 mm. A circumferential metal wire is placed on the outer surface of the cup. When the cup, during the operative procedure, is placed in its anteversion position of 10-15 degrees there is a hiatus of the circumferential wire of about 10 mm. When a roentgenogram is taken, the surgeon can measure the amount of separation and thus be reassured that the anteversion position is acceptable. The outer surface of the cup is uneven to allow for the adherence of the methyl methacrylate.

One of the advantages of the Charnley-Muller prosthesis is its inner canted surface. This permits a greater range of endoprosthesis motion but with less opportunity for its dislocation. It has been estimated by Charnley that the wear of the polyethylene cup is approximately 1 mm in 5 to 6 years. As the amount of decrease in the thickness of the cup is in an area of 5 mm, 25 to 30 years would be required before replacement is considered. Such a long span of wear and tear would allow the orthopaedic surgeon to select patients from a wide range of ages.



Figure 3. A 23-year-old male with rheumatoid spondylitis involving the right hip. No ambulation was possible. Complete bony ankylosis was present on the anteroposterior roentgenogram.



Figure 4. Anteroposterior roentgenogram showing a total hip replacement with the cement restrictor anchoring the acetabular polyethylene cup. The patient has been ambulatory.

The Charnley-Muller femoral head prosthesis (FHP) is composed of an alloy of chromium-cobalt-molybdenum and has a diameter of 32 mm. The 10 mm increase of the femoral head over the Charnley prosthesis allows for the weight bearing pressure to be distributed over a large surface. The standard prosthesis has 3 lengths for the femoral neck which can be used; long, medium and short (see Figure 2).

Usually there is a standard stem, which is attached to the femoral head and neck, that is placed into the reamed femoral shaft previously prepared with methyl methacrylate.

Charnley and Muller have observed that by using the 3 components in the total hip replacement; methyl methacrylate, high density polyethylene cup and the femoral head prosthesis, the postoperative course of the patient shows improvement over the conventional cup arthroplasty. There is: (1) marked reduction of pain, (2) a passive range of motion can be achieved rapidly, (3) ambulation with weight bearing is done within several weeks, (4) gait pattern is far more acceptable, (5) progressive physical therapy is easily tolerated by the patient.

INDICATIONS

The primary reason that the patient seeks the total hip replacement is because of hip pain and inability to work or walk satisfactorily. The original disease patterns were basically three: primary osteoarthritis, secondary osteoarthritis and rheumatoid arthritis. However, as the procedure proved to be successful, other disabilities were felt to be imposed by total hip replacement. We include at the University Medical Center not only the above but ankylosing spondylitis, post-traumatic injury, sickle cell disease, malignant bone tumor, failure of a conventional hip operative procedure and Paget's disease.

In general, certain criteria must be considered before undertaking surgery: (1) pathological involvement of both femoral head and acetabulum; (2) no past or present hip infection; (3) age of the patient; (4) anticipated life expectancy of the patient; (5) no other operative procedure would be satisfactory.

1. *Pathological Involvement of Both the Femoral Head and Acetabulum*

Damage to both the acetabulum and the femoral head represent the prime criteria for total hip replacement. If only the femoral head is damaged, either an endoprosthesis or cup arthroplasty is suitable. When the acetabulum is involved, a cup arthroplasty may be suitable. In a recent evaluation of the Charnley arthroplasty, Eftekhar noted that of the 120 patients, the diagnosis of osteoarthritis was present in 76 per cent, rheumatoid arthritis in 31 per cent and "others" for 13 per cent.[3] In all the patients in the review there was involvement of both components of the hip joint.

2. *Infection Free*

One of the most severe restrictions, in fact contraindication, to the low fraction arthroplasty is the existence of a pyogenic infection either in the acute or chronic stage. Any joint infection, chronic bacterial synovitis or osteomyelitis, is characterized by episodes of remission and recurrences. Any major surgical procedure into this area faces the problem of relighting the previous infection. This is especially true when the orthopaedic surgeon is implanting a foreign body.

Although a postoperative wound infection is not a complete disaster, the surgeon is courting this serious problem when he chooses the total hip operation.



Figure 5. Anteroposterior roentgenogram showing osteoarthritis of the right hip in a 53-year-old male. There are both acetabular-femoral head involvement characterized by bone sclerosis and articular cartilage destruction.

3. *Age*

The American Academy of Orthopaedic Surgery has recommended that the patient be over 50 years of age prior to selecting the total hip replacement. Charnley,[2] in a review of 582 patients, stated that 87.5 per cent were from 51 to 82 years of age. The following age distribution is duplicated:

TABLE 1

AGE DISTRIBUTION IN 582 PATIENTS

Years	*Percentage*
0-30	1.5
31-50	9.5
51-60	20.5
61-70	40.0
71-80	27.0
80+	0.5

In a visit to the center for hip surgery in England during 1970, I was able to examine a 27-year-old man who had a total hip replacement at the age of 21 for rheumatoid arthritis. He had returned to full gainful employment. There is no doubt that the patient should be an adult and that the selection for operation be based on clinical problems, the involved pathology and the anticipated end results. We feel that there should be restrained optimism in that age group over 80 and under 50. Yet, we do not believe a rigid age limitation is the best approach to the selection of the patient. A young person with rheumatoid spondylitis and marked restriction of ambulation should be considered for total hip replacement (see Figures 3 and 4). This is especially important to the surgeon when he faces the problem of bilateral hip disease.

4. *Anticipated Life Expectancy*

Certain diseases such as sickle cell anemia, Marie-Strumpell arthritis and severe rheumatoid arthritis, because of their widespread systemic pathology, lessen the normal life span. For these relatively few patients the total hip operation can be of value to reduce the discomfort of joint pain and permit ambulation. Our special concern is in those patients with SS sickle cell disease who cannot be ambulatory because of hip joint destruction. The avascular necrosis of the femoral head is caused by multiple bony infarctions leading to the production of an articular joint surface that cannot be revascularized with nonweight bearing or bone graft techniques.

We recommend the total hip replacement in patients that are 21 years and over that have a limited life expectancy. Obviously if the patient lives for 20 to 40 years after the total hip replacement, resurgery may be required. We have not had a sufficient time of follow-up care to be able to state that the life-span of the total hip replacement is beyond 20 years.



Figure 6. Anteroposterior roentgenogram showing the total hip replacement with the radiopaque methyl methacrylate outlining the serrations of the cup and the stem of the prosthesis.

5. *No Other Operative Procedure Would Be Satisfactory*

The selection of the operative procedure is a dual decision of the patient and the physician. When the patient is given a choice between an arthrodesis and an arthroplasty, selection, for the most part, is made for the movable joint. Patients with bilateral hip disease can have an arthroplasty on one side and an arthrodesis on the other but this is limiting. The authors feel that total hip replacement can provide motion bilaterally and not restrict the patient to the confinement of the arthrodesis. Outside the diagnosis of a pyogenic joint, we urge that total hip replacement be considered.

Another suggestion for total hip replacement is for those patients who have had conventional hip operations which have, for mechanical reasons, failed. This would include cup arthroplasty, the hanging hip operative procedure for osteoarthritis, endoprosthesis for secondary osteoarthritis and other types of arthroplasties. Although resurgery with a cup arthroplasty or endoprosthesis has been successful, the potential for return of pain and decreased range of motion remains.

The Girdlestone procedure, long a salvage operation, consisting of removal of a portion of the acetabulum and femoral head resulted in a painless pseudoarthrosis but a shortened leg of several inches. Most patients did enjoy the lessened pain, but objected to the shortening. The total hip replacement can serve as a substitute for this extremely disabling procedure.

COMMENTS

The total hip replacement is an operative procedure which is no longer in the experimental phase. Careful pre- and postoperative evaluations of the patient including roentgenograms are advised. (The details of the preoperative and operative care techniques are available from the authors.) At the Medical Center we have followed a joint evaluation system modified after the principles of D'Aubigne and Pastel. Three factors are considered when the hip joint is evaluated; pain, ambulation and range of motion. The evaluation of each factor is graded in the range of 1 to 6 with the latter representing normal function. If the patient has a composite sum of 10 or less considering the 3 factors, then he or she is a candidate for surgery.

The greatest criticism which we have in the scoring system is that it relates only to hip pathology and excludes the myriad problems of a systemic disease. Furthermore, the joint impairments of other weight bearing structures are omitted.

Our experience at this point is limited to 32 operative procedures, yet it seems to the authors that the following points are worth mentioning.

Because of the uniqueness, not especially the difficulty, of the total hip replacement, its instrumentation and techniques should not be "learning as you go." We suggest visits to centers where it is being done and attendance at special courses given by the American Academy of Orthopaedic

TABLE 2

EVALUATION

I. PAIN

1	2	3	4	5	6
Severe narcotics required, chair-life or bed rest 50 per cent of time	Severe on walking, restrict activities, two crutches or canes	Pain tolerated, limited activity, wakes up at night, cane or crutches	Pain activity decreases with medications or rest, one cane	Slight pain, takes aspirin, occasional use of a cane	No pain

II. WALK

In bed 50 per cent or more, can stand, 2 crutches or canes, just able to walk	Walks less than 300 feet, use canes or crutches, gross limp	Uses one cane, rests after 5-10 min. walk, moderate limp	Uses 1 cane, walks 25-30 min., mild limp	Walks long distances, occasional use of cane, slight limp	normal gait

III. RANGE OF MOTION*

	Right	Left
Flexion		
Extension		
Abduction		
Adduction		
Internal rotation		
External rotation		

1 2 3 4 5 6

* 90° hip flexion; 10° abduction rated a 3.

Total_____

Surgery on the use, handling and understanding of the methyl methacrylate.

Once the patient is selected, a team composed of an internist, rheumatologist (whenever possible) and renal consultant is advised. Although such an approach tends to compartmentalize the patient, we believe that it is invaluable.

The medical workup deserves a comment: renal, hepatic, SMA 12, SMA 4, rheumatology and pulmonary preoperative studies establish a baseline for any preoperative or latent complications; especially hepatic or renal problems if and when they may arise.

A program of pre- and postoperative physical therapy is needed. By instituting early postoperative exercise patterns, ambulation does not become a difficult chore by the patient.

Lastly, a method for lifetime evaluation of the patient is recommended. Once the patient is discharged from the hospital, he or she is seen every 4 months for 2 years, then each 6 months.

Thus far, the early postoperative results tend to be encouraging for those patients operated upon at the Medical Center since May, 1971.

Several of our patients have returned to rather strenuous occupations; train engineer (see Figures 5 and 6), domestic, a steel worker and a housewife. Eighty per cent have had marked relief of pain, improvement of ambulation and joint function. One infection has developed, accompanied by a posterior dislocation. This occurred in a patient with SS sickle cell disease. The wound was debrided, closed antibacterial irrigation used and reduction achieved. Three months have passed without a recurrence of either complication. The use of the closed irrigation technique rather than removal of the prosthesis with an infection deserves special consideration and future thought. One patient died secondarily from penthrane (anesthesia) toxicity.

We support the view expressed by Charnley that procedures such as cup arthroplasty, displacement osteotomy and endoprosthesis be retained as primary operations for those pathological problems that indicate their use. There should be some caution in selecting patients under the age of 50 and over 80. Yet, in patients who have shortened life spans from systemic disease, why should "by the book" age limits be followed? Perhaps for this group the total hip replacements serve best. Insistence upon rigidly following the 50 year old age restriction does not consider those patients who cannot ambulate without a low friction arthroplasty.

SUMMARY

The objective of this paper has been to reiterate the principles of the biomaterials and to provide specific guidelines for the selection of patients. In the experience of the authors the results of the total hip replacement for osteoarthritis, rheumatoid and Marie-Strumpell arthritis, posttraumatic osteoarthritis and sickle cell disease have been most satisfactory. ★★★

2500 North State Street (39216)

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INSTANT REACTION

A suburbanite installed automatic garage doors for his wife.

"Do they really work?" he was asked by the neighbor.

"You better believe it," he answered. "She doesn't even have to push the button. When they see her coming up the driveway, they fly open in sheer terror."

Radiologic Seminar CXIX: Diaphragmatic Hernia: A Cause of Respiratory Distress in the Newborn

PAUL H. MOORE, M.D.
Pascagoula, Mississippi

RESPIRATORY DISTRESS in the newborn must be dealt with immediately. The initial question that must be answered is whether the distress is the result of thoracic or extra thoracic disease. If the respiratory distress is of thoracic origin, is it a medical or surgical case?

After the initial physical examination, a chest roentgenogram is usually requested. In most cases a good technical study followed with adequate interpretation makes the distinction and allows the clinician to proceed along the correct line of therapy.

Approximately five per cent of normal asymptomatic newborns will have either localized or diffuse patterns of aeration disturbance throughout their lungs. The interpretation of the radiographs of a neonate with respiratory distress, therefore, remains a continuing challenge.

Medical causes of respiratory distress greatly outnumber the surgical causes. The most common cause of surgical respiratory distress is that of

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From the Department of Radiology, Singing River Hospital, Pascagoula, Miss.



Figure 1. Frontal view of neonate in respiratory distress cyanosis. The cyst-like air collections in the left chest are gas-filled loops of bowel. The heart and mediastinal structures are displaced to the right.



Figure 2. Frontal view of neonate showing the appearance of a fluid filled left hemithorax. Heart and mediastinal structures are displaced to the right. The examination was made before ingested air had entered the small bowel. The stomach is partially filled.



Figure 3. Frontal view showing uneventful recovery following surgery of neonate pictured in Figure 1.



Figure 4. Frontal view showing recovery following surgery of neonate in Figure 2. Some atelectasis remains in left upper lung field.

diaphragmatic hernia. This diagnosis, if the above procedure is followed, can usually be made immediately.

The most common diaphragmatic hernia in the neonate is the hernia of the pleuroperitoneal foramen or foramen of Bochdalek. The hernia occurs approximately six times more frequently on the left than on the right side. This is fortunate because the diagnosis is made much easier when the defect occurs on the left side. When the defect is on the right, the diagnosis may be delayed.

Furthermore, barium studies and a liver scan may be necessary—whereas this is seldom the case with a left-sided defect. The position and the appearance of the bowel gas is one of the most important signs in the diagnosis of a left-sided diaphragmatic hernia.

The two cases presented here demonstrate quite well the two different patterns one can expect from left-sided defects. The characteristic radiographic feature is that of multiple air and fluid filled loops of bowel having a cystic appearance in the affected hemithorax (see Figure 1). The initial impression may be that of multiple pulmonary cysts. The absence of normal gas containing bowel in the abdomen and the scaphoid appearance of the abdomen clinically are helpful features in the diagnosis.

In rare instances during its early stages, the appearance may be that of fluid filled density within the chest without the usual associated air containing features, with the heart and mediastinum shifted to the contra-lateral side (see Figure 2). Absence of gas within the abdomen may help establish early recognition before air reaches the herniated bowel. Figures 3 and 4 respectively show the unremarkable recovery of the above two neonates following surgical repair.

The diagnosis, treatment and ultimate discharge of a neonate with respiratory distress, regardless of its origin, is one of the more gratifying results in medicine. ★★★

811 Jackson Avenue (39567)

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The Mississippi Foundation for Medical Care

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Corinth, Mississippi

NEVER BEFORE in the annals of medical history has the concept of the foundation for medical care been more applicable to the practice of medicine than today. Never before has the time-honored private practice of medicine been so threatened with extinction. Encroachment upon the traditional physician/patient relationship comes from all quarters, under the guise of economic control. Since the turn of the century, the medical profession has been a constant target, first from the press, then the legal profession, the federal government and now the general public.

The physician has been too busy serving his patients to be concerned about the many day to day political and socioeconomic changes going on about him. The practice of medicine is a full time job. The physician is an individual; he thinks and acts as an individual, and he treats his patients as individuals. He usually performs within the concept that as long as he strives to deliver quality medical care to his patients, little harm can come to him, his patients or the physician/patient relationship, from those who oppose or criticize him. Thus he has spent little time and effort in his own defense against the threats and abuses of those who have entered the health care picture in recent years.

With such harassment of the physician, which has quickened in tempo in recent months, the quality of medical care will surely be downgraded. Even the future of medicine is threatened by this hostile environment as our bright and talented young people turn to other less stressful fields of endeavor for their life work.

Shall the physician continue as a quiet, stoic individual, acting within the confines of his professional duty to his patients and to his own conscience, ignoring that which is about to engulf him and the private practice of medicine; or should he unite with his colleagues in the battle for that which he believes is right, not only for his freedom in the practice of medicine, but for the best health of his patients?

These were questions that commanded the attention of the entire medical profession in San Joaquin, California, in 1954 when Dr. Donald C. Harrington, a practitioner in that community founded the first foundation for medical care as an answer to the then prevailing threat to the private practice of medicine by the closed panel type of contract medical practice. After 18 years this foundation continues to flourish and serve the purpose for which it was organized. This innovation in the health care delivery system has spread throughout the United States.

The foundation for medical care eludes definition, but is most often thought of as a buffer or intermediary between the physician and the third party payor for the benefit of the patient. It is an instrument separate and apart from the medical association, constructed on a non-profit basis and incorporated so as to permit the foundation to enter into contracts and make financial commitments not authorized by a medical association.

At the 103rd annual session of the Mississippi State Medical Association, the House of Delegates authorized and empowered the Board of Trustees to organize and operate the Mississippi Foundation for Medical Care. The charter, that of a non-profit organization under the supervision of the Board of Trustees, was granted July 6, 1971, and the first organizational meeting was held August 25, 1971, in Jackson. The foundation is completely separate from the Mississippi State Medical Association. It has no assets and no liabilities at the present time. The EMCRO program, now being operated under the supervision of the Mississippi State Medical Association and financed by a federal grant, is in no way connected with the foundation at this time. However, it is anticipated that the product which is being developed by the EMCRO program will be phased into the operation of the foundation sometime in the near future. It is hoped that this will be a salable product to the third party payor and revenue-bearing for the foundation.

There are at least three well known but different concepts of the medical care foundation in operation today. The three types are represented by: (1) the San Joaquin, California model, (2) the

Chairman, Board of Trustees, Mississippi State Medical Association.

Hennepin County, Minnesota model, and (3) the Missouri state model.

The San Joaquin model monitors quality medical care, acts as a peer review mechanism for the medical profession, negotiates reasonable maximum fee schedules, and contracts with third parties for claim review and adjudication.

The Hennepin County Foundation offers no minimum standards as a prerequisite for its contracts and does not process claims. Instead the foundation furnishes the third party payor with "norms" and fee guidelines to use in screening out claims not meeting these criteria. It functions as a guiding hand to the third party payor in reviewing only those claims not meeting the "norms" or standards.

The concept practiced by the Missouri State Foundation is merely that of a peer review organization. Its principal concern is monitoring Medicare and Medicaid. It sets no minimum standards or fee schedules. The expenses of the medical care foundation are defrayed by the Missouri State Medical Association.

MISSISSIPPI CONCEPT

The following concept of the Mississippi Foundation for Medical Care was adopted by the Board of Trustees of the Mississippi State Medical Association. The foundation is an instrument, completely separate from the Mississippi State Medical Association, organized on a non-profit basis for the benefit of the patient, the physician and the third party or insurance carrier in the health care delivery system. It serves as an intermediary or buffer wherever the services of the physician are challenged or questioned.

The Mississippi Foundation for Medical Care monitors quality medical care by a peer review mechanism which is fully controlled by physicians and offers recommendations or "norms" as to: (1) whether there exists a need for medical or surgical care in each case; (2) the appropriateness and adequacy of the delivery of that medical or surgical care; (3) the reasonable cost of such medical or surgical care.

The "norms" or standards for medical care are set up by committees composed of specialists from each discipline of medical practice. These "norms" will be reviewed and changed as advances in medical science and the delivery care system dictate to keep abreast of quality medical care.

The foundation sponsors quality care to the patient at a reasonable cost determined from fees charged in the patient's area by practitioners qualified in medical practice similar to the patient's attending physician. Unusual circumstances which make it necessary to provide greater than usual medical or surgical services may justify a charge greater than the usual and customary area fee. A schedule of usual and customary fees will be negotiated and derived from physicians' schedules of fees, profiles from the CHAMPUS program, and those offered by third party payors.

FOUNDATION PRINCIPLES

The foundation recognizes and respects certain principles pertaining to the delivery system of medical care: (1) The consumer should have the right to choose his insurance carrier on a competitive basis, and the type coverage he feels best suited to his needs. He should have the right to free choice of physician and hospital or institution for medical care. (2) The physician should have the right to serve under whatever system of health care delivery he chooses; capitation, salary, or fee for service. He should be free to contract direct with his patients for charges for medical and surgical care, as long as they are proper and within the bounds of reasonableness.

There are many advantages in the medical care foundation for all concerned. All parties involved in the delivery of medical care, the physician, the patient and the insurance carrier or third party, join hands in the medical care foundation mechanism.

The foundation serves as an advocate of quality care at a reasonable cost to the patient, with built-in freedom of choice of physician and medical facility.

The foundation promotes peer review entirely under the control of the medical profession. It serves as a protection to the physician when his services are challenged or questioned, and ferrets out those few unscrupulous practitioners who bring discredit to the medical profession. It serves as a buffer or intermediary between the physician and the third party payor.

The foundation offers the third party payor a "fair shake" by sponsoring and monitoring quality medical care with protection against the abuses of over-utilization and over-charging.

RESPONSIBILITIES

There are certain responsibilites that all parties concerned must assume for the benefit of the health of the community. In the operation of the medical care foundation, the medical profession assumes the responsibility for review of the delivery of medical care in the state of Mississippi. One cannot divorce responsibility from authority and thus with the responsibility should go the authority of review not only for quality care but quality care for a reasonable fee. More explicitly if the foundation is to successfully assure quality care by peer review activities, then the third

party payor should abdicate the position of a rigid, fixed indemnity fee schedule and recognize the decisions of the foundation in its efforts toward peer review and cost control. The third party or insurance carrier should also share responsibility with the foundation for promoting and encouraging quality medical care, in accordance with the "norms" and standards developed by the foundation and should use these "norms" and standards for the purpose of screening claims for review.

The patient needs to understand the medical care delivery system better. He must recognize the problems facing the medical profession today, problems often beyond immediate control. Such matters as the paucity of physicians, struggling under the burden of the delivery of medical care to an expanding public and greatly aggravated by the many difficulties of Medicare and Medicaid, can only be solved by long range planning.

Progress in the delivery of the quality medical care so in demand by the public today has been greatly hampered by inflation. Too, the injudicious treatment of medical liability in the courts has given rise to the practice of defensive medicine. This influence often restricts those decisions of the physician directed toward better care of the patient. Harassment and severe criticism of efforts of 98 per cent of the physicians who practice quality medical care because of the inappropriate activities of the less scrupulous 2 per cent, do not provide for good public relations, and tend to discourage and downgrade quality medical care.

CREDIBILITY GAP

The medical profession's willingness to accept the leadership in improving the medical care delivery system in the state of Mississippi, by implementing the Mississippi Foundation for Medical Care, brought into focus the necessity of bridging the "credibility gap" between the physician and others concerned with the system. It is recognized that although the functions of the foundation are basically of a professional nature, there remain many facets in its operation which are in need of attention and outside the scope and usual activities of the physician. This observation is supported by the intense concern of the consumer public in the problems of the health care system. For this reason changes in the composition of the governing board have been made.

It is the opinion of the Board of Trustees of the Mississippi State Medical Association that the Board of Directors of the Mississippi Foundation for Medical Care should be composed of a majority of physicians as the problems of the foundation are primarily of a medical nature. The board feels however, that the influence and cooperation of hospital administrators, nursing personnel, the insurance councils, labor and management are very desirable.

For this reason the Board of Directors of the Mississippi Foundation for Medical Care, now composed of 12 physicians, will be expanded to include one director from each of the following organizations: the Mississippi Hospital Association, Mississippi Nursing Association, Mississippi Economic Council, and AFL-CIO.

Added to this will be an advisory non-voting committee of two selected from the insurance council to sit with the Board of Directors. Although the Board of Directors will be the official governing body of the foundation, as composed above, the work of the Committee on Peer Review and all functions of the review mechanism will be performed by physicians only.

The Mississippi Foundation for Medical Care is now in its infancy. To attain success in its operation, many factors must be considered, the most important of which are: (1) There should be at least 85 per cent of qualified physicians in Mississippi enrolled as participating members. Only enrolled members are eligible to participate in composing a fee schedule and voting on policies of the foundation. These decisions should reflect the desires of the vast majority of practicing physicians. All physicians are earnestly urged to send in their application for enrollment at the earliest convenient date. (2) The Peer Review Committee, which is the heart and soul of the foundation, must be strong, committed, and dedicated to the principles of the foundation for medical care. The committee's actions should warrant the cooperation and support of all members of the foundation.

The present Board of Directors is working diligently in cooperation with the executive staff to develop a workable model that is satisfactory to the physician, and only with his cooperation, help and patient understanding can it succeed. ★★★

815 Childs Street (38834)

Proceedings of the House of Delegates

104th Annual Session
May 8-11, 1972
Biloxi, Mississippi

THE 69TH ANNUAL SESSION of the House of Delegates was convened during the 104th Annual Session of the Mississippi State Medical Association, in pursuance to lawful notice given, on May 8, 1972, in the Top of the Sheraton, the Sheraton-Biloxi, Biloxi, Mississippi, at 9:10 o'clock in the morning by Dr. Arthur E. Brown of Columbus, President. The invocation was spoken by the Rev. Olin G. Beall of the Episcopal Church of the Redeemer, Biloxi.

After extending greetings, Dr. Brown presented the Vice Speaker, Dr. John B. Howell, Jr., of Canton and the Speaker, Dr. William E. Lotterhos of Jackson, who assumed the chair. Dr. Raymond S. Martin, Jr., of Jackson, Chairman of the Reference Committee on Credentials, reported the presence of a quorum of 89 registered and seated delegates in accordance with Section 3, Chapter V, By-Laws of the association.

ANNOUNCEMENT OF REFERENCE COMMITTEES

Reports of Officers and Board of Trustees
- Daniel T. Keel, Brookhaven, Chairman
- Samuel B. Johnson, Jackson
- Frederick C. Minkler, Jr., Pascagoula
- Thomas W. Wesson, Tupelo
- Jack A. Atkinson, Brookhaven

Miscellaneous Business
- Walter H. Rose, Indianola, Chairman
- Jack A. Stokes, Pontotoc
- Thomas L. Ketchum, Ripley
- Joe S. Covington, Meridian
- Victor E. Landry, Lucedale

Medical Practices
- Arthur A. Derrick, Jr., Durant, Chairman
- S. Lamar Bailey, Kosciusko
- Wendall B. Holmes, McComb
- Sidney O. Graves, Natchez
- Whitman B. Johnson, Clarksdale

Rules and Order of Business
- William M. Gillespie, Jr., Meridian, Chairman
- William L. Wood, Jr., Tupelo
- W. Boyce White, Laurel

Credentials
- Raymond S. Martin, Jr., Jackson, Chairman
- Tom H. Mitchell, Vicksburg
- Ed Pennington, Ackerman

Constitution and By-Laws
- Raymond S. Martin, Jr., Jackson, Chairman
- Arthur E. Brown, Columbus
- Tom H. Mitchell, Vicksburg

APPOINTMENT OF TELLERS AND SERGEANTS-AT-ARMS

John G. Atwood, Jr., Meridian, Chairman
G. Leroy Howell, Starkville (absent on May 11 and Dr. John G. Egger of Drew served as Teller)
Frederick C. Minkler, Jr., Pascagoula

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

To assist the Speaker and Vice Speaker in the orderly conduct of the proceedings of this House of Delegates, your Reference Committee on Rules and Order of Business makes the following recommendations:

Conduct of Business: Under the By-Laws, the business of the House must be conducted according to *Sturgis Standard Code of Parliamentary Procedure,* and the Speaker and Vice Speaker should prescribe the order of business as set out in the By-Laws. To insure proper recording of the transactions, all delegates recognized should identify themselves. Except for distinguished visitors and those having official capacity in the association, unanimous consent should be obtained for extending the privilege of the floor to nonmembers of the House of Delegates. The report of the Reference Committee on Credentials should

constitute the formal and official roll call of the House.

Reference Committees. The purpose of reference committees is for affording all members of the association an opportunity to discuss their views on matters under consideration by the House of Delegates.

Reports. All reports and resolutions presented should be referred to the appropriate reference committee by the chair immediately after their presentation, the only exception being those which are of such a nature as to require no further consideration and are, therefore, ready for decision by vote of this House. Reports published in the *Handbook of the House of Delegates* are considered to have been formally presented and should be referred to appropriate reference committees by the chair. Debate should be reserved on all such presentations until such time as the reference committees conduct formal hearings and when they report to the House.

Resolutions. To avoid burdensome tasks upon the reference committees and to insure that all members have adequate opportunity to discuss their views, the House should permit no introduction of resolutions after the present meeting except for (1) matters of an emergency nature, the validity of such emergency to be determined by majority vote, (2) matters relating to a scientific section or scientific work, and (3) proposed amendments to the Constitution and/or By-Laws which would then lie on the table for one year.

The report of the reference committee was adopted.

ADOPTION OF TRANSACTIONS

On motion by Dr. C. D. Taylor, Jr., of Pass Christian, second by Dr. Stanley A. Hill of Corinth, the Transactions of the 68th Annual Session of the House of Delegates, 103rd Annual Session of the association, May 3-6, 1971, published in Volume XII, Number 8, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, August 1971, were adopted.

REMARKS OF THE SPEAKER

Dr. William E. Lotterhos: Your Speaker and Vice Speaker welcome you to the 104th Annual Session of our association. This session undoubtedly will take its place in history as being one of our greatest. Even though the amount of business to be considered does not appear to be any more than usual in volume, its significance and impact on the health care delivery system will be profound. We hope that all delegates and alternates are thoroughly familiar with all of the material that has been furnished to you before this meeting, and let me urge that all of you attend as many reference committees as possible. Also, let me urge you to invite our colleagues who are not officers or delegates to attend these reference committees with you, members of the association will have the privilege of entering into the discussion, and if there are those experts among us who are not members that have something to contribute, they will be granted permission by obtaining unanimous consent of the reference committees. So, let us realize the seriousness of the situation, and as private medicine is fighting for its very existence, let us make wise, informed decisions that will be beneficial to our patients. After all, that is really why we exist, "our patients."

During the past year your Vice Speaker and I were privileged to attend another Southeastern Conference of medical organizational speakers in New Orleans. This is one of the most worthwhile sessions that we can attend in helping us learn more about Parliamentary Procedure and how to conduct your business in a more effective manner. I recommend that the Board of Trustees continue to support this program by sending its Speaker and Vice Speaker.

One of the things that I have learned is to ask those who are making reports for our consideration to outline the positive recommendations in order that we may readily be aware of that part of the report that requires action, so, I am now putting this in the form of a positive recommendation to our future House of Delegates, and I am glad to do so by starting this report by a summary of positive recommendations at the conclusion.

In my travels around the nation I am aware of a broadening gap between town and gown. We need to make some concerted efforts to have these two essential bodies, that is, the medical organizations that represent the majority of the private sector, and the teaching institutions that are educating our future physicians to improve our liaison. One area that I hear more commonly these days is "that damned Admissions Committee doesn't know what it is all about." It is true that they are having a far greater number of applicants than they can find a place for, and this truly is one of the hardest working committees of any medical school. Several states have attempted to improve the relationship of medical organizations and teaching institutions by having a practitioner on the admissions committee, therefore, I am taking this opportunity to recommend that the Mississippi State Medical Association re-

quest the dean of our medical school to have a practitioner on his admissions committee, that this man be selected from one of three nominated by the Mississippi State Medical Association, and that the association subsidize this man's expenses for attending these meetings. This would mean an average of twelve meetings per year, also the man selected should be willing to devote the necessary time to this hard working committee.

Now comes a very sad pronouncement by your Speaker. Sad, because I love working with this association and its members, and you have honored me with many positions of leadership, but since I have accepted an invitation to join the faculty of the Medical College of Georgia as Chairman of the Department of Family Medicine, I will be transferring my membership to the Georgia Chapter. Since you have asked me to serve for one more year as your Speaker, I am recommending that you accept my resignation and elect Dr. John B. Howell, Jr., your Vice Speaker, to the position of Speaker, and that you elect a Vice Speaker at this session in order that whoever is chairman will have the advantage of some experience before going into your next session.

Mrs. Lotterhos and I are very grateful to you all for your many kindnesses and courtesies.

Recommendations. (1) Continue to send Speaker and Vice Speaker to the Southeastern Organization

(2) Appoint a Practitioner to the UMC Admissions Committee

(3) Positive recommendations for those making reports to outline their recommendations

(4) Accept my resignation and elevate Vice Speaker to Speaker and elect a new Vice Speaker.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The reference committee wishes to commend Dr. Lotterhos for his many years of devoted service to our association and especially for his most recent contribution as Speaker of the House of Delegates. We further wish to express our deep regret at his leaving Mississippi and our best wishes for his continued success in his new role in medicine at the Medical College of Georgia.

We endorse Dr. Lotterhos's recommendation that the association continue to send the Speaker and Vice Speaker to the Southeastern organization, if possible.

Your committee feels that it is not qualified to approve or disapprove the appointment of a practitioner to the Admissions Committee of the University of Mississippi School of Medicine but would refer it to the Council on Medical Education for further study and recommendation.

We feel that the Speaker's recommendation to have those making reports to outline their recommendations is an excellent suggestion and we recommend adoption of it.

(Item 4 of the Speaker's recommendations was referred to the Nominating Committee.)

The report of the reference committee was adopted.

PRESENTATION OF DISTINGUISHED GUESTS

The Speaker presented the following distinguished guests:

Dr. Robert E. Blount, Jackson, Dean and Director of the University of Mississippi Medical Center.

Mr. J. C. Woosley, Jackson, President, Blue Cross-Blue Shield.

Mr. Sam Cameron, Jackson, Assistant Director, Mississippi Hospital Association.

Dr. C. Ferrell Varner, Memphis.

ANNOUNCEMENT OF THE NOMINATING COMMITTEE

Following a recess for caucuses by association districts, the Nominating Committee was announced:

Whitman B. Johnson, Jr., Clarksdale, District 1.

James O. Gilmore, Oxford, District 2.

Thomas W. Wesson, Tupelo, District 3.

S. Lamar Bailey, Kosciusko, District 4.

Lawrence W. Long, Jackson, District 5.

John G. Atwood, Jr., Meridian, District 6.

W. Boyce White, Laurel, District 7 (unavoidably absent on May 10—Jerald S. Hughes, Bay Springs, substituted for Dr. White)

Sidney O. Graves, Jr., Natchez, District 8.

James T. Thompson, Moss Point, District 9.

Dr. Thompson was elected chairman of the committee which conducted an open meeting on May 10, 1972, and posted the nominations for the information of all members in addition to submitting a written report of nominations to the House of Delegates.

ADDRESS OF THE PRESIDENT

The Speaker declared the House of Delegates in open session, and the President, Dr. Arthur E. Brown, delivered his address. The address has been published separately in Volume XIII, Number 7, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, July 1972.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee commends Dr. Ar-

thur E. Brown, president of our association during 1971-72, for his timely address to the House of Delegates and for his outstanding performance of duty during the year of his presidency.

The report of the reference committee was adopted.

SPECIAL ADDRESS

Dr. Wesley W. Hall of Reno, Nev., President of the American Medical Association, addressed the House of Delegates as the principal speaker of the 104th Annual Session.

REPORT OF THE DELEGATES TO AMA

Your delegates to the American Medical Association, in conformity with custom and past practices, have limited their joint report to this House of Delegates to key policy actions at the annual and clinical conventions. Because of the comprehensive reporting in the *American Medical News* and *Journal AMA* of scientific and subsidiary activities, further reporting of these aspects of the AMA conventions would constitute needless duplication and repetition.

Dr. G. Swink Hicks of Natchez entered upon the first year of his second full term, Jan. 1, 1972. Dr. C. D. Taylor, Jr., of Pass Christian entered upon his second year of his first full term, Jan. 1, 1972. Dr. Stanley A. Hill of Corinth entered upon his second year of his second full term. Dr. Joseph B. Rogers of Oxford was elected and entered his new term of office as alternate delegate.

This reporting covers the 120th Annual Convention at Atlantic City, June 20-24, 1971, and the 25th Clinical Convention at New Orleans, Nov. 28-Dec. 1, 1971. Your delegation is indebted to our president and other officers and members who participated in these conventions and worked with us.

Atlantic City Annual Convention. There were many reports considered which accented the effect of younger physicians wanting to come into the AMA as "full partners." The House referred to the Board of Trustees action on creating a section for those physicians in accredited training programs. To broaden the base of AMA membership, it was adopted that there would be three classifications of membership for Direct Members: (1) Service Members; (2) Physicians employed by Federal agencies; and (3) Interns and Residents. The role of physicians' assistants was thoroughly discussed and the intent to use them passed the House with the resolution taking nothing away from the physician but allowing him to delegate that which he thought he should and with leaving the use of such assistants to the constituent societies for adoption, "with the full extent consistent with sound medical practice."

The AMA reiterated its previous stand that peer review is a function to be carried out by physicians through and under the sponsorship of county and state societies. The House also advised continued study and evaluation of HMO's and the membership will be informed of progress. The House recommended that close working relationships be maintained between medical care foundations. There was much discussion of proprietary advertising in the mass media because of the dangers of self prescribing and inherent dangers therefrom. It was "Resolved, That the AMA cooperate in every way possible in the studies being conducted by the Federal Trade Commission to assure the enactment of proprietary drug advertising regulations in the interest of protecting consumers." The discontinuance of drugs and combinations by the FDA received criticism and information about the thoughts and findings of practicing physicians will be communicated to the FDA. Continuing discussion in another field of drugs illustrated interest in the control of stimulant drugs and suggested that the "AMA urge all physicians to limit their use of amphetamines and other stimulant drugs to specific, well recognized medical indications."

There will continue to be exploration into the establishment of professional liability insurance through the AMA and/or state and county medical societies. Many other aspects of insurance will be studied as well. Special amateur radio banks to be assigned for use of health care services, particularly emergency services, was discussed and adopted.

Clarification of the AMA position with respect to physician liability involved in giving contraceptive advice and prescriptions to unmarried minor females was made. Review by the AMA General Counsel and others indicated that, although liability for providing contraceptive services to an unmarried minor cannot be ruled out, this appears unlikely. The House adopted the amended report, by inserting the following:

"In view of these circumstances, many physicians may feel that the possibility of liability is remote and that, therefore, they may proceed in prescribing contraceptive materials and devices to unmarried minors in accordance with their best medical judgment and discretion. Physicians who make this determination are advised to observe closely the following safeguards: (1) definite efforts should be made to obtain consent from the minor's parents or legal guardians wherever possible; (2) the total situation of the patient should be considered and a full case history obtained



if skin is infected, or open to infection... choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyci hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in no less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

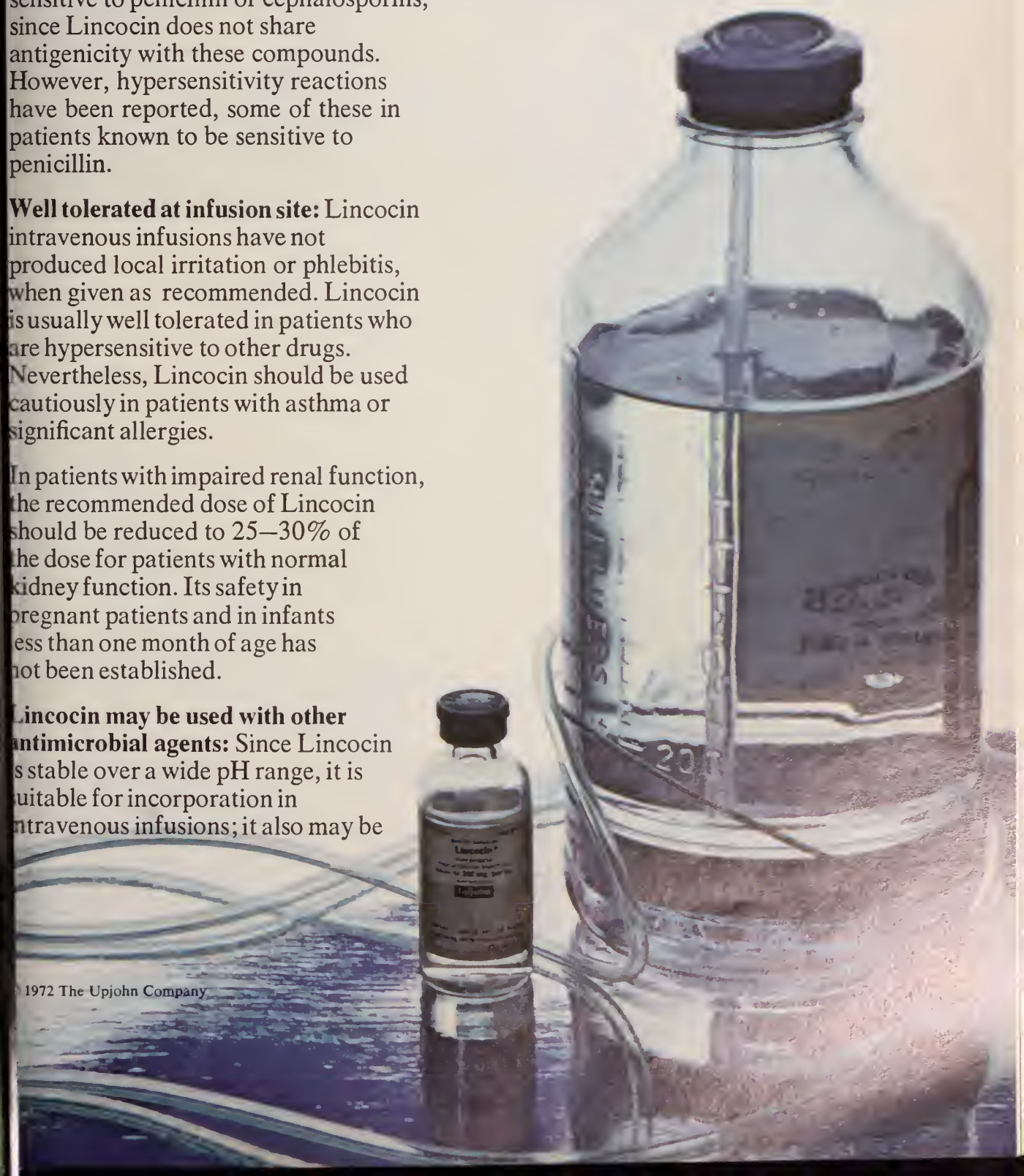
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatmen *Skin and mucous membranes*—Skin rashe urticaria, vaginitis, and rare instances of e foliative and vesiculobullous dermatitis hav been reported. *Liver*—Although no direct r lationship to liver dysfunction is establishe jaundice and abnormal liver function tes (particularly serum transaminase) have bee observed in a few instances. *Cardiovascul* —Instances of hypotension following paren teral administration have been reporte particularly after too rapid IV administra tion. Rare instances of cardiopulmonary a rest have been reported after too rapid I administration. If 4.0 grams or more admi istered IV, dilute in 500 ml of fluid an administer no faster than 100 ml per hou *Special senses*—Tinnitus and vertigo hav been reported occasionally. *Local reactio* —Excellent local tolerance demonstrated t intramuscularly administered Lincoci (lincomycin hydrochloride). Reports of pa following injection have been infrequen Intravenous administration of Lincocin i 250 to 500 ml of 5% glucose in distille water or normal saline has produced n local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m* Capsules—bottles of 24 and 100. *Steri Solution, 300 mg per ml*—2 and 10 ml via and 2 ml syringe. *Syrup, 250 mg per 5 m* —60 ml and pint bottles.

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and recorded; (3) if an "emergency" need exists, the medical record should reflect the basis for the physician's judgment that pregnancy would constitute a more serious health hazard than birth control measures; (4) the minor should be required to sign a consent form indicating a clear awareness of the problems and the nature and consequences of the physician's contraceptive recommendations; and (5) the physician should insist upon follow-up care whenever indicated."

A resolution was passed to direct the AMA to take appropriate actions to remove legal and administrative obstacles to the distribution of birth control information, medication and devices and to undertake a public education program on birth control and family planning.

We had the pleasure of hearing the President of the United States address the House of Delegates. His speech was nationally televised and widely reviewed and we will not attempt to summarize it here, but we will quote the acceptance of the challenge as adopted by the House of Delegates:

"(1) Continue to contribute to the modification and improvement of the nation's health care system;

"(2) Design a system that will provide the patient with freedom of choice, economic relief and quality care;

"(3) Continue to contribute to the improvement of the nation's mental health, to a revitalization of the spirit of America; and

"(4) That physicians concern themselves with the problem of drug abuse and that the American Medical Association establish a new national program to fight the drug peril."

The inaugural address of the president of the American Medical Association was given by Dr. Wesley W. Hall. Dr. Hall is a native Mississippian, but he practices in Reno, Nev. He recommended the advisability of a constitutional convention to streamline our "governing process to suit the pace and needs of the twentieth century physician and the people." The House acted to refer the matter of a constitutional convention to the Council on Long Range Planning and Development and to report back to the clinical convention in New Orleans.

Dr. C. A. Hoffman of West Virginia was elected president-elect and the other officers were circulated in the *American Medical News*. Your junior delegate had the privilege of serving on the Reference Committee on Miscellaneous Business.

New Orleans Clinical Convention. The 1971 Clinical meeting of the AMA was convened in New Orleans on November 28. The House of Delegates met in general session and again considered reports and resolutions from the various Boards, Councils, and Constituent chapters of the association. Again the recognition of need to encourage young physicians to become active promoted the House's actions to set up mechanisms for a separate section for interns and residents and one for students. They will be presented at the 1972 annual meeting by the Board of Trustees. The House decried the acceptance of promotional "gifts" by physicians from pharmaceutical houses as it amounted to rebating. Again the principles of the delivery of quality medical care were reaffirmed and the government has been urged to replace the term "provider" with the term "physician," and the term "consumer" be replaced with "patient" where medicine is involved. The AMA supported the concept of granting temporary licensure to volunteer physicians in medically indigent communities where the need arose and moved that states be encouraged to support amendments to allow such practice. The AMA supported the Federal Environmental Protection Agency and moved to give it jurisdiction over all other federal agencies and departments identical to its responsibility and authority.

The physician's assistant has gained additional status in that the "Essentials of an Approved Educational Program" have been formulated. Other paramedical specialists have also had approval for curricula granted and medical school admission policies were discussed and the House of Delegates advised that admission committees of medical schools include a significant number of practicing physicians.

The determination of proper spacing of visits to extended care facility patients should be under physician's direction was made, and that he should decide upon the frequency. The House asked that studies be instituted to properly pinpoint the areas involved in rising health care costs.

The Mississippi State Medical Association introduced a resolution on "The Health Hazard of the Fire Ant" with the intent that, up to now, the health hazard involved had not been recognized. Testimony was presented by Dr. Frazer Triplett, an allergist and pediatrician from Jackson, Miss., and by the Mississippi State Commissioner of Agriculture, Jim Buck Ross. The Louisiana ecologists debated the amendment in great force, but the Reference Committee recognized the health hazard of the fire ant sting and suggested that limited methods of eradication be done. In the past the fire ant was not recognized by the AMA at all as a health hazard. We were pleased by the House of Delegates' action. There was much discussion of the smallpox vaccination confusion and also discouragement with the new narcotic registration forms.

The business of the AMA received much con-

sideration. President Wesley W. Hall was rather pointed in many of his desired reforms and the Reference Committee heard rather heated discussion on many of the facets of the AMA reorganizations. The Reference Committee recommended the whole study be referred to the Council on Long Range Planning. This was adopted. Emergency room and infant and maternal mortality came under scrutiny again and recommendations to suppress them have been approved.

Your delegates realize that in the space of this report, much consolidation has been done, but all the material is available to the general membership through the medium of the *Journal AMA* and *AMA News*. We suggest that all physicians peruse these magazines as if they were the "daily paper;" they are just as newsworthy even if the sports and comics have been omitted.

Expression of Delegates. Your AMA Delegates express their appreciation to our own House of Delegates, to the Board of Trustees with whom we sit at all meetings, and to the general officers for support, assistance, and continuing communication so that we may be properly prepared to represent your wishes and policy positions.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee appreciates Dr. G. Swink Hicks, senior delegate, and Dr. C. D. Taylor, junior delegate, appearing before our committee and discussing portions of their report. They requested that they attend meetings of the AMA as instructed delegates and encouraged members to make known to them their wishes.

Your reference committee recommends that no change be made in the status quo of those who assist physicians but would look with favor on continuing the study for upgrading the training that might be available for such persons. We recommend that this matter be considered further by the Board of Trustees and the Council on Medical Education.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Organization and Duties. The Council on Scientific Assembly is a constitutional body of the House of Delegates, charged with the responsibility of planning the annual session of the association to include all scientific activities, programming, and the scheduling of annual session events. The council membership consists of the chairmen and secretaries of the seven scientific sections and the secretary-treasurer of the association, a total of 15 members.

104th Annual Session. Planning and organization of the 104th Annual Session was initiated in the summer of 1971. The council has altered the format followed in former years to incorporate general sessions on socioeconomic topics to try to stimulate lagging attendance at the scientific programs. Tuesday and Wednesday mornings will feature programs on peer review and medical care foundations, and professional liability and corporations, respectively. The seven scientific sections will be holding combined meetings this year on three afternoons. Meeting jointly will be surgery and ob-gyn; medicine, family practice, and preventive medicine; pediatrics and EENT. To the maximum possible extent, conflicts in schedules and programming have been eliminated, although as a practical matter, such total elimination is not possible.

At the request of the Board of Trustees, the council asked that the specialty societies assume responsibility for the scientific program. Section chairmen agreed to consult their respective specialty societies as to their willingness to do this for the 1972 annual session only. For a number of specialty representatives, finances appeared to be a problem.

We are gratified that at the present annual session, 15 specialty groups have related or concurrent meetings with us. Three medical alumni groups have fraternal and social occasions, and various nonscientific but medically related bodies will meet during May 7-11. We continue to believe that providing for and encouraging these related meetings increases the attractiveness of the annual session to the membership and benefits attendance. We are glad to continue support of the Woman's Auxiliary and its concurrent annual session with us.

The mid-day scientific motion picture programs have been discontinued because of poor attendance. The council is proud to present for the first time this year 12 hours of lectures, papers and top medical presentations in all 20 specialties on special inhouse television at the Sheraton-Biloxi. Registrants will be able to view nightly telecasts in their rooms on channel 2 during the annual session. Taped from recent AMA conventions, the presentations are made possible through the AMA Communications Division and are sponsored by Roche Laboratories. We are gratified with the presentations in the scientific exhibit, and we urge every member and guest to view these and the technical exhibits.

Technical Exhibit. Your council notes that

ethical pharmaceutical firms, suppliers, and others eligible for purchase of space in our Technical Exhibit are declining our invitation to participate in growing numbers. This is not confined to Mississippi, because other state medical associations, major state specialty societies, and national organizations are having the same experience.

Harsh federal drug legislation, changing concepts in marketing, and tighter budgets for advertising are taking a toll of technical exhibit revenues. We have circularized more potential exhibitors than ever before, and we continue to do all things possible to increase this participation.

Annual Session Funding. The Council on Budget and Finance and the Board of Trustees have requested your council to make the annual session financially self-sustaining. The Board has eliminated the $300 cash honorarium in the Scientific Exhibit and restored the Scientific Achievement Award, a bronze medallion especially designed for the association. Other economy measures have been instituted, including deleting the services of the full-time press director, Mr. Bill Keith of Jackson. An association-wide cocktail party will again be conducted which includes no dinner or entertainment.

The management of the annual session is being accorded the closest attention by your council and the executive staff to see that the present annual session will be financially self-sustaining.

Headquarters Hotel. The annual session will be held at the Sheraton-Biloxi for the second year. The council conducted a critique of the hotel's services after the 103rd annual session and on overall performance gave the Sheraton-Biloxi a high mark. A great number of spoken and written compliments were received after last year's meeting. Problems were noted with the electrical service, air conditioning, telephone service, exhibit handling and janitor service, but the hotel management was informed and has agreed to try to improve these deficits. We believe that the hotel will improve as the new staff gains experience.

Expression of the Council. Your Council on Scientific Assembly is grateful for the support, cooperation, and assistance we have received in planning the 104th Annual Session.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

We particularly commend the council on the inclusion of socioeconomic issues and the quality of the scientific program, including closed circuit T.V. of top medical presentations. We note that the council met with the hotel management on deficiencies observed in the 103rd Session, and we again recommend that this be done for there is evidence of deterioration of service.

The chairman of the reference committee moved adoption of the report.

Dr. Raymond S. Martin, Jr., chairman of the Council on Scientific Assembly, moved that the last sentence be amended to delete "for there is evidence of deterioration of service," stating that a detailed critique would again be sent to the hotel. The amendment was seconded by Dr. W. Boyce White of Laurel.

There being no discussion, the Speaker put the amendment which was adopted. The report of the reference committee was adopted as amended.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Organization and Duties. The Council on Medical Service is a constitutional body of the House of Delegates, consisting of nine members, one from each association district, elected for terms of three years each. There are three *ex officio* members who are our president, president-elect, and secretary-treasurer. The council is charged with the responsibility of ascertaining and studying all aspects of medical care in Mississippi. Under the council's jurisdiction are assigned activities of the association in medical service, emergency service programs, medical care for the indigent, and the work of allied medical agencies and organizations.

The council is assisted by seven committees, four constitutional and three *ad hoc,* all of which have conducted formal programs and activities during the 1971-72 association year. These embrace a wide range of subject areas in our purview of responsibility, including maternal and child care, blood and blood banking, mental health, occupational health, nursing, family planning and college health.

Maternal and Child Care. The continuing maternal death studies have been conducted by our committee and now are in the 15th year. The committee published a summary of its studies in the February edition of the JOURNAL. Individual members have had interesting case reports published in the JOURNAL. All of the study data are now computerized and the committee has conducted and published substudies on anesthesia deaths and hemorrhage. The committee works closely with the Department of Obstetrics and Gynecology of the University Medical Center.

The committee authorized the report, "A Thirteen Year Report, 1957-1969," to be published in the February JOURNAL. It will be the second such report on maternal mortality in Mississippi which has been published in the JOURNAL. It was found that in 1957, there were 75 maternal

deaths in Mississippi to 14 in 1969 which marks a tremendous decrease in the number of cases studied by the committee. During this period, the percentage of the total number of deaths from hemorrhage has shown a sharp decline from 59.7 per cent in 1957 to 25.0 per cent in 1969. The data obtained during the 13 year period has enabled the committee to draw a broad picture of the pattern of maternal deaths in Mississippi.

The training of nurse midwives at the University of Mississippi Medical Center has increased the availability of health manpower in the state and should help to further decrease maternal mortality. In one largely rural Mississippi county, the community physicians in collaboration with the local health department are utilizing certified nurse midwives and health aides to provide comprehensive maternal and infant care. In addition to intensive home visiting, prenatal patient education and nutrition supplementation, this health care team also provides in-hospital delivery of the uncomplicated obstetrical patients by nurse midwives working under physician supervision. The abnormal and high-risk obstetrical patients are delivered by the physicians. Within one year, the previously excessive maternal and infant mortality in that county has been decreased to a level which is near the national average. It is hoped that similar programs can soon be started in other areas.

The committee continues to make available sets of "Maternal Health Desk Cards" which are distributed to hospitals through chiefs-of-staff and chiefs of ob-gyn services. The committee conducts regular quarterly meetings to pursue its duties and review case studies.

The chairman is Dr. William B. Wiener of Jackson, and the committee has seven members and three consultants in medicine, pathology, and anesthesiology.

Blood and Blood Banking. This committee was accorded constitutional status by the House of Delegates at the 101st Annual Session in 1969. It has been active in conducting Congressional liaison in connection with National Blood Donors Week and in the issue of a commemorative postage stamp on blood donors in a cooperative effort to focus attention on this acute need.

The committee has further pursued studies on computer-based blood bank inventory information systems and intends to institute a pilot project making use of the association's computer. The committee has approved a three phase operation which would require modest financing by the participating medical institutions.

The committee has kept close watch over the Jackson Blood Assurance Program which became operational in September 1971. This program has recorded more blood donors in the first three months of operation than did the Greenville, South Carolina program in its first year of operation. The Jackson program was modeled after the Greenville program which has been in existence for several years.

The committee has continually reviewed legislative activities of interest within its field and has given valuable consultation in connection with the blood related bills now pending before the 1972 Regular Session of the Legislature.

The committee agreed unanimously to draft a resolution commending Dr. Kenneth M. Heard, as chairman of the Committee on Blood and Blood Banking. The newly appointed chairman is Dr. Warren N. Bell of Jackson.

Mental Health. Continuing its work in broad areas of mental health, the committee has been acutely aware of problems in drug addiction. During the year, it has conducted educational activities in this connection and made materials available to physicians who have addressed school, youth, and other nonmedical audiences on the subject.

Another major concern of the committee has been drug addiction and drug abuse. Our program of supplying information to physicians and the public on drug abuse has been increased and a special kit of professional information, including reprints of scientific articles, policy statements, brochures, and suggested speeches has been produced and furnished on request.

The chief concern this year has been with the development of the new mental health centers in Mississippi. Regional Commissions are now officially organized and operating in 11 of 16 of the state's designated mental health retardation regions. Seven of these have operating mental health and/or mental retardation programs while the remainder are in various stages of planning. Of these, there are five mental health centers which have been funded with staff grants and are now in operation.

At the time of preparation of this report, legislation is pending to formalize into statute the creation of a State Board of Mental Health and Mental Retardation and a State Department of Mental Health and Mental Retardation. The association has supported this legislation, which has the overall objectives of extending care for mental health and retardation.

The chairman of the committee, Dr. John J. Head of Jackson, resigned because of personal health and his retirement. The newly appointed chairman is Dr. Jerry M. Ross of Whitfield.

Committee on Occupational Health. The committee, charged with the study of all aspects of occupational health, continues to pursue an interest of a suitable and legal base for Workmen's Compensation in Mississippi. Presently there are numerous bills pending before the 1972 Regular Session of the Legislature concerning Workmen's Compensation.

A major program of this committee is development of guides for occupational health programs in small plants in Mississippi and individual members continue to prepare editorials and scientific articles for publication in the JOURNAL.

At the time of preparation of this report, legislation is pending on bringing the state's statute in line with the Federal standard of the Occupational Health and Safety Act.

Dr. George D. Purvis of Jackson has submitted his resignation as chairman after serving 15 years. Your council commends his exercise of leadership and able representation before local, state, and national groups. The new chairman is Dr. George H. Martin of Vicksburg.

Committee on Nursing (ad hoc). The committee has been intensely devoted to the establishment of a MNA-MSMA Joint Practice Committee in Mississippi during the 1971-72 association year. At the Oct. 14, 1971, meeting of the Council on Medical Service, our Committee on Nursing was given authorization to appoint physician members to service on a Joint Practice Committee in conjunction with the Mississippi Nurses Association. Our committee viewed the following problems which relate specifically to the matter of role function that must be taken up by a Joint Practice Committee:

1) The utilization of nurses in providing health care. Many studies indicate that nurses spend 50 to 75 per cent of their time in non-nursing functions. And this proves to be a major source of dissatisfaction.

2) The development of a career perspective in nursing practice. Too frequently, the opportunities for advancement in nursing lead away from the patient into nursing administration or education. There must be increased incentive for providing care.

3) The expansion of the role of nurses to ensure that their talents and capacities are fully used and challenged. Too many individuals feel that they are not encouraged to apply their education to the limits of their ability—and in answer to the needs of patients.

The first meeting of the MNA-Joint Practice Committee was at Jackson on Jan. 26, 1972, at which time Dr. Tom H. Mitchell was elected chairman. The committee agreed that its primary purpose should be in exploring means by which the role of the R.N. may be expanded so as to utilize fully their skills in patient care in an atmosphere that provides challenge and stimulus for continued growth and development of these skills.

The committee conducted extensive activities in 1971 with reference to mandatory licensure for nurses. The measure was passed by the Regular Session, and the association's policy position, adopted at the 102nd Annual Session was:

1) The association supports mandatory licensure of nurses in principle, reserving the prerogative of making further changes and improvement and further reserving to the Board of Trustees final approval.

The committee chairman has served as the association's representative on the nurse education advisory body to the Board of Trustees of Institutions of Higher Learning. The advisory committee reports progress in construction of new facilities and improvement of facilities in nursing schools in the state.

The committee takes the position that there should be no further licensure of allied health professions pending study and clarification of their respective roles in health care delivery. This is the position of the American Medical and American Hospital associations.

Active liaison is maintained with the Mississippi Nurses Association, and regular joint meetings with our committee are conducted.

Committee on College Health (ad hoc). The Council on Medical Service authorized the appointment of the committee at its Oct. 14, 1971 meeting. The committee is charged with the responsibility of stimulating interest in health programs and improvement of health facilities on the college campuses in Mississippi.

The committee has scheduled an organizational meeting this spring. Dr. John C. Longest, Director of Student Health Services, Mississippi State University, is chairman of the committee. There are seven members and five consultants of the committee.

Family Planning (ad hoc). The Council on Medical Service authorized the appointment of the committee at its Oct. 14, 1971 meeting. The committee is charged with pursuing all aspects of the activities outlined in the sections entitled, "Health, Maternal and Child Care," and "Social Factors, Education for Family Life," of the study *The Needs of Children in Mississippi.*

The committee consists of three members. A chairman has not been selected.

Other Council Activities. Some small but encouraging progress is being made in placing practicing physicians as voting members of hospital governing boards, despite opposition to this by

many hospitals. This useful and important means of liaison with the medical staff bears the endorsement of the Joint Commission on Accreditation of Hospitals, the American Medical Association, the American College of Surgeons and most major national specialty societies, our own state medical association and most of our sister state medical associations.

We continue educational efforts and programs designed to upgrade emergency medical service. During the year, the helicopter demonstration project has shown great promise, as reported in the JOURNAL. Staffing of hospital emergency rooms with physicians has greatly extended these services, and we endorse the various approved postgraduate and continuing education programs for physicians, nurses, and other allied professional personnel in this area as being vital to improvement of emergency medical services. There is a salutary trend in legislative development on standards for ambulance and driver standards.

We met prior to the implementation of Title XIX Medicaid with state officials of the Medicaid Commission, and we have carefully monitored program development. Oversight of program development remained a primary responsibility of the Board of Trustees during the year, because of the Extraordinary Session of the Legislature to shape the program. Your council, however, is prepared to assume oversight of the ongoing program when and if the Board and House of Delegates so direct, as was the case in Medicare.

The council expresses appreciation to its several committees, some of which are among the most active bodies of the association, and to our colleagues on the Board of Trustees who have worked closely with us, giving understanding support and guidance to our problems and programs. The council emphasizes to the House of Delegates that its area of responsibility and concern, the actual practice of medicine and delivery of care, must have support from all members and adequate staff in our Executive Office. We repledge our best efforts in carrying out our work.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

We commend the Council on Medical Service for its substantial work in our behalf and for its varied and versatile program which is carried on through four constitutional and three *ad hoc* committees. These include Mental Health, Maternal and Child Care, Occupational Health, Blood and Blood Banking, Nursing, College Health, and Family Planning. We approve the report of the Council on Medical Service and recommend its adoption by the House of Delegates.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT A OF THE COUNCIL ON MEDICAL SERVICE

Committee of the Council. Under the provisions of Section 2, Chapter IX, By-Laws of the association, the Council on Medical Service has four constitutional committees: Occupational Health, Mental Health, Maternal and Child Care, and Blood and Blood Banking. These committees consist of not less than five and no more than seven members appointed for terms of three years each. The council also appoints *ad hoc* committees on a year-to-year basis.

Committee on Nursing. For six years, the council has maintained a five-member Committee on Nursing on an *ad hoc* basis. This has been one of the most able and productive committees of the association, having made studies of mandatory licensure for nurses, accreditation of new nursing schools in Mississippi, clinical training for nurses and coordination of nursing training in Mississippi, and the establishment of a Mississippi Nurses Association-Mississippi State Medical Association Joint Practice Committee.

The Council on Medical Service believes that this committee should be accorded constitutional status and its members given tenure. This does not, however, affect the membership of the House of Delegates, since committee membership does not confer delegate and voting status.

Proposed Amendment. It is recommended that Section 2, Chapter IX of the By-Laws, be amended to add in the listing of constitutional committees the Committee on Nursing.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

Your Council on Constitution and By-Laws, sitting as a reference committee, considered Supplemental Report A of the Council on Medical Service. It recommends that Chapter IX, Section 2, By-Laws of the association be amended to make the Committee on Nursing a constitutional committee. We concur in this recommendation.

The report of the Council, acting as a reference committee, was adopted.

REPORT OF THE BOARD OF TRUSTEES

Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is additionally charged with the duties and responsibilities prescribed by law for directors of corporations. In the discharge of these duties,

the Board shall have conducted six meetings in 1971-72 consisting of 12 meeting days since the 103rd Annual Session.

Seven officers sit with the Board of Trustees at all meetings. They are the president, president-elect, secretary-treasurer, speaker, vice speaker, and the two AMA delegates. The Board is assisted in its work by support of the executive staff. All 1971-72 meetings were conducted at Jackson.

This annual report includes actions on matters referred to the Board by the House of Delegates and items relating to management and policy functions which are among the Board's responsibilities.

Referrals from the House of Delegates. Matters referred to the Board of Trustees at the 103rd Annual Session and actions by the House requiring further actions by the Board include:

(a) *Resolution No. 2.* This resolution provides for the establishment of an Office of State Medical Examiner who shall be a qualified forensic pathologist. The resolution incorporates the office into the faculty structure of the University of Mississippi School of Medicine where the medical examiner may engage in teaching as well as in performance of the duties of state medical examiner. A suitable bill was prepared and introduced in the 1972 Regular Session of the Legislature and is pending before the Mississippi House of Representatives at the time of this report. The bill would, in addition to establishing the Office of State Medical Examiner, establish qualifications for appointment, prescribe duties and authorities, authorize performance of autopsy, and provide for records and reports.

(b) *Resolution No. 3.* This resolution calls for enactment of legislation providing for mandatory licensure of child care centers and day care facilities in Mississippi both as to environmental health and safety standards. A bill was drawn up and introduced in the 1972 Regular Session of the Legislature but it died in the Senate Committee on Public Health and Welfare. However, a similar bill has passed both chambers and has been signed into law by the Governor.

(c) *Resolution No. 5.* This resolution opposes the policy of the Food and Drug Administration to remove from the physician's therapeutic armamentarium combination ingredient drug products, thereby denying him and his patient the convenience and economy of many proven products. The resolution proposes that this policy by the Food and Drug Administration will increase the costs of drugs to patients and will waste research and clinical manpower, facilities, and expense in satisfying these restrictive requirements. With many other state medical associations and national organizations taking the same position, including a sharp protest by the American Medical Association, the FDA receded from its inflexible position, and the entire issue was reviewed. Now regulations have been issued which are far more reasonable, less arbitrary, and more generally acceptable to the practicing profession.

(d) *Resolution No. 6.* This resolution approves the creation of a full academic and clinical Department of Family Practice at the University of Mississippi School of Medicine as well as appropriate residencies in family practice for training board-eligible physicians in this specialty. The University of Mississippi School of Medicine has created a Division of Family Medicine whose function it will be to direct emphasis on comprehensive family health care. Aim is to help meet the critical instate health manpower shortage through the "family doctor" concept.

(e) *Resolution No. 7.* This resolution calls for an all-out effort to publicize the significance and ramification of the Emergency Personnel Act of 1970. The resolution encourages action of public and private agencies in Mississippi to make rapid efforts to determine areas at both the state and county levels in need of emergency health personnel and to assure that the state derives maximum possible benefit from the act.

(f) *Resolution No. 8.* This resolution sponsors legislation for the authorization of the State Board of Health to purchase adequate professional liability insurance to protect the public health physician. The resolution is based upon a court decision in New York where the state was held to have the responsibility to defend, indemnify, and hold harmless a public health physician who is sued over a matter arising out of the performance of his duties. Informal discussions have been conducted with Dr. Hugh B. Cottrell in this connection. The St. Paul Companies have furnished this coverage at a nominal price for all public health physicians in or under the State Board of Health.

(g) *Resolution No. 9.* This resolution urges that each component medical society establish a committee on medicine and religion which will be, in turn, supported and assisted by the state medical association's Committee on Medicine and Religion. The MSMA Committee on Medicine and Religion has pledged itself to contacting an interested physician in each component medical society. The chairman, Dr. John M. Alford, Jr., of Greenwood, has worked diligently in expanding the medicine and religion program.

Nominations for the State Board of Health. Vacancies in three Public Health Districts occurred in 1971, and it was therefore necessary for the House of Delegates to make nominations to the Governor at the 103rd Annual Session.

The following nominations were sent to Gov. John B. Williams for his consideration:

Public Health District 6:
Joseph G. McKinnon, M.D., Hattiesburg
William E. Weems, M.D., Laurel
Bedford F. Floyd, Jr., M.D., Gulfport

Public Health District 7:
G. Swink Hicks, M.D., Natchez
W. Moncure Dabney, M.D., Crystal Springs
R. J. Field, Jr., M.D., Centreville

Public Health District 8:
Wilfred Q. Cole, Jr., M.D., Jackson
E. L. Whitfield, M.D., Florence
H. C. Ricks, Sr., M.D., Jackson

While the nominations were in Gov. William's office, Dr. R. J. Field, Jr., of Centreville, withdrew his name. Gov. Williams went out of office without acting on the nominations; therefore, the Board of Trustees instructed the Executive Office to send another list of the names to Gov. William L. Waller for his consideration. To date, Gov. Waller has not acted upon these nominations.

(Editor's note: Since then, Gov. Waller acted on the nominations and the new public health district officers are Drs. Joseph G. McKinnon, District 6; W. Moncure Dabney, District 7; and Wilfred Q. Cole, District 8.)

CHAMPUS. The association concluded its 15th year as fiscal administrator for the CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) program in Mississippi. The operation continues to grow with an increase in claims volume of 15 per cent and a dollar volume increase of 20 per cent in 1971, and it is a $2 million operation. Compensation to physicians for professional services is made under the concept of usual and customary fees under medical peer control.

Less than 3 per cent of claims received are such that they are reviewed by the seven-member review committee. Payment to physicians and others is made weekly. Fees submitted by Mississippi physicians who participate in the CHAMPUS program are the basis by which a usual and customary fee concept is established.

Journal MSMA. The JOURNAL has concluded its 12th consecutive year of continuous publication with the 144th issue in December 1971. It remains the largest single association-sponsored project and is a team effort among the Editors, Committee on Publications, and JOURNAL staff. The thrust of the JOURNAL continues solidly around Mississippi medicine, the association, and the Mississippi physician.

Total pages and advertising pages and revenues increased over 1970, but printing costs continued to rise. The staff has worked with the Ovid Bell Press to achieve every possible economy including a change of paper, careful book design, and sparing use of color.

Among the services the JOURNAL contributes to the association by publishing and absorbing costs are: complete program of the 104th Annual Session, Handbook and proceedings of the House of Delegates, Constitution and By-Laws, publication of special issues with reprints, regular listing of component medical societies officers and meeting dates.

The Board expresses appreciation to the Editors, committee and staff in the production of this vital membership service.

Insurance Programs. There are approximately 2,100 contracts among 1,450 members in the association's two major group insurance programs. In addition to the Blue Cross hospitalization group, the association sponsors general accident, disability, health, and life programs with the Continental Companies and a professional liability insurance program with the St. Paul Companies. The association handles no premium collections nor processes claims. The Board takes the position that any profits or payments which might thereby accrue to the association should be passed along to participating members in the form of lower premiums or greater benefits.

About 1,400 contracts are in force in several Continental groups which are administered by the Thomas Yates Co. of Jackson, and the participants constitute more than 40 per cent of the membership.

There are about 900 participants in the St. Paul professional liability insurance program. We enjoy the fourth lowest premium rate in the United States. The St. Paul Company who has administered this program for 10 years makes available claim review to any member against whom a claim or suit is threatened or initiated. The Board commends this program to physicians, pointing out its substantial monetary benefit in savings to members. The professional liability market has become a critical matter for most American physicians.

The Board urgently recommends that each member exercise care and diligence in securing this vitally necessary coverage and that threatened or instituted litigation be brought before the Board. We are not immune in Mississippi from the crisis in liability litigation which has come to so many states.

Mississippi Health Expo I. In early 1971, the thought of planning a large "health exposition" in Mississippi through the sponsorship of participat-

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The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four month Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.

Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen**®).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect).

1st choice: An estrogen-dominant O.C. (such as **Enovid-E**®).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen**®).

ıge 21, short, mammose, with ıormal menses, some acne. Was put ın prenuptial regimen of 50-mcg.-strogen/moderate-progestogen).C. for two months. Now has ıcreased acne.

Indicates metabolic production f androgen or relative estrogen eficiency.

1st choice: Switch to a 100-mcg.-strogen combination (such as **novid-E**® or a sequential).



Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough...or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

ge 25, tall, slender, athletic, ith flat chest. On a progestogen-ominant 50-mcg.-estrogen O.C. as recurrent trichomoniasis nd Monilia.
Indicates estrogen deficiency and xcess of progestogen in current O.C.
1st choice: Switch to a com-ination pill with 100 mcg. strogen and less progestational ctivity (such as **Enovid-E**® or **vulen**® or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.
Indicates probable need for more estrogen.
1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen**®).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.
Indicates probable progestogen excess.
1st choice: Switch to a center-spectrum pill (such as **Ovulen**®).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has pre-menstrual fluid retention and leg cramps.
Indicates probable excess of estrogen.
1st choice: A 50-mcg.-estrogen/progestogen-dominant pill (such as **Demulen**®).



Ovulen® a balanced center-spectrum O.C. for most
Each white tablet contains ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen® a moderately progestogen-dominant O.C. for many
Each white tablet contains ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.
Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.

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Enovid-E® a moderately estrogen-dominant O.C. for some
Each tablet contains norethynodrel 2.5 mg./mestranol 0.1 mg.

SEARLE Product of Searle Laboratories Division
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Where "The Pill" Began

r a brief summary prescribing information, ease see next page.

a family of O.C. products to help you match the right pill to the right patient

Ovulen®

Each white tablet contains
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions – Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note – Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication – Ovulen and Demulen are indicated for oral contraception.

Contraindications – Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings – The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions – The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor such as epilepsy, migraine, asthma, cardiac or renal dysfunction require careful observation. In breakthrough bleeding and in all cases of irregular bleeding per vaginam nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives – A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests, coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values, metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners. Oral Contraception and Thrombo-Embolic Disease. J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W. and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age. Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report. Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E., Masi, A. T., Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study. Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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Enovid-E®

norethynodrel 2.5 mg. mestranol 0.1 mg.

Actions – Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication – Enovid-E is indicated for oral contraception.

The *Special Note*, *Contraindications*, *Warnings*, *Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®

brand of norethynodrel with mestranol

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272R

ing health oriented organizations was seriously considered by Mrs. Guy T. Gillespie, Jr., of Jackson. Mrs. Gillespie won the support of many community leaders and gained additional support through the interest of several organizations. The first meeting for the project was held on March 30, which was attended by some 48 people representing 27 organizations. It was at this meeting that the planning group announced the project's name, Mississippi Health Expo I; the date, October 1-3, 1971; and the place, Mississippi State Coliseum. The major emphasis would be on health education, recruitment in health careers, and disease detection screening. The format would include mechanical and electrical exhibits, demonstrations, lectures, training sessions, and films and entertainment.

At the April 8-9, 1971, meeting of the MSMA Board of Trustees, Mrs. Gillespie presented the project to the Board requesting the Board's approval and sponsorship. The Board endorsed and agreed to sponsor the Mississippi Health Expo I and authorized the appointment of an *Ad Hoc* Committee on Health Expo to work with others for incorporation, policy development, program content, and exhibits. The physicians appointed by the Board as members of the *ad hoc* committee were: Drs. C. G. Sutherland, Raymond F. Grenfell, Jim G. Hendrick, and Raymond S. Martin, Jr., all of Jackson. The state medical association's House of Delegates at the 103rd Annual Session also approved the proposed project and recommended that the Board of Trustees work with the officials of the Mississippi Health Expo I to bring it into being and furnish sponsorship of our association.

On June 9, 1971, Governor John Bell Williams met with members of the executive committee and the Committee on Health Expo to discuss the project. In the Governor's discussion, he endorsed Expo I as an excellent project for Mississippians and tentatively accepted the invitation for the opening.

On June 16, it was announced that Expo I was organized as a non-profit corporation without shares or stockholders; and that there would be five incorporators from the 31 participating organizations: Mississippi State Medical Association, Regional Medical Program of the University Medical Center, Mississippi State Board of Health, Mississippi Hospital Association, and First National Bank.

Mississippi Health Expo I opened with a state ambulance helicopter landing with hundreds of school children, teenagers, and other guests present for the official opening. Landing in the helicopter were Governor John Bell Williams and Dr. Arthur E. Brown of Columbus, Mississippi State Medical Association president. A "grand tour" consisting of the Governor, Dr. Brown, Dr. Raymond S. Martin, Jr., Dr. Robert E. Blount, and Mrs. Guy T. Gillespie was guided through the coliseum. The three day period provided those in attendance a chance to witness 100 exhibits and demonstrations involving more than $250,000 in production expense and including a special speaker each day of event. Special speakers included Dr. Robert Q. Marston of Bethesda, Maryland, Director of National Institutes of Health and former dean of the University Medical School, Dr. Paul Dudley White, noted cardiologist, and Dr. James Q. Simmons, medical director of the National Multiple Sclerosis Society. At its conclusion, Expo I had attracted 50,000 persons and was represented by over 50 organizations which delivered countless hours of work and planning beginning in the late spring.

MECO. The Medical Education Community Orientation program consisting of ten weeks in a hospital environment with a structured curriculum was approved by the Board of Trustees to continue for the summer of 1972. It was developed as a joint project of the state medical association, state hospital association, and Mississippi Chapter of the Student American Medical Association. The students themselves have performed much of the necessary correspondence, administrative work, and all matching of applicants with hospital vacancies.

In confirming support of the program, the Board requested that summer externs be assigned to a specific staff physician in each participating hospital.

It was also agreed that some agreement should be signed by the extern with the hospital, assuring his participation in the program once he has been selected.

Participating students, staff physicians and hospital administrators have felt the program was worthwhile as evidenced by the 33 hospitals participating in 1972 in contrast to 24 last year.

Legislative Program. In 1971, the House of Delegates directed, in response to a special report of the Board and the address of our then-president, Dr. Paul S. Brumby, that a new and intensive legislative program be developed and implemented. This consisted of continued production of the weekly legislative newsletter, monthly meetings of the Council on Legislation during sessions of the legislature, regular meetings with key committees of the House of Representatives and Senate, daily staff representation at the Capitol, continuation of the Emergency Medical Care Unit at the Capitol, and doctor-to-legislator communications.

This program has been implemented, and the "Mississippi Medical Legislative Report," a four-page weekly newsletter, has been furnished by first class mail to all members. The Council on Legislation initiated monthly meetings during which conferences are held with the public health committees of both chambers. The association has presented testimony, both oral and written, on a number of occasions, and our executives have represented us daily at the Capitol. The Board commends the Council on Legislation for developing and implementing this program.

The state medical association had a six point legislative program for the 1972 Regular Session: (1) State Medical Examiner Act, (2) licensure of child day care facilities, (3) training program in family practice at UMC, (4) support of capital improvement program for universities and UMC, (5) lowering age of consent to give blood from 21 to 18, and (6) to permit therapeutic abortion for medical reasons.

Mississippi Foundation for Medical Care. At the 103rd Annual Session in Biloxi, May 3-6, 1971, the Board of Trustees was empowered by the House of Delegates to create and establish the Mississippi Foundation for Medical Care.

The MFMC was incorporated on the sixth day of July, 1971, and was organized on the 25th day of August at 735 Riverside Drive, Jackson, Mississippi.

The MFMC is a wholly-owned, nonprofit, voluntary corporation controlled by the Mississippi State Medical Association. As set forth in the By-Laws, it is governed by a Board of Directors, not less than nine nor more than 12 in number. Currently, there are ten physician-members serving on the Board of Directors. As is done in the medical association, no director may serve more than three consecutive terms of three years each. The board chairman is the real and acknowledged head of the foundation, and his fellow physician-officers are the vice chairman and secretary-treasurer.

The foundation's executive staff consists of a president and a vice president-comptroller. The directors may appoint such other subordinate officers as necessity may require. Provision is made in the By-Laws for committees which are named by the Board of Directors.

As is true with all other medical care foundations, the Mississippi organization has two classifications of membership, administrative and participating.

Administrative members are the Trustees of the state medical association, and in them are vested two important authorities: The Board of Trustees appoints the foundation's Board of Directors, assuring that the will of the medical association extends into every organizational and operational aspect of the foundation. The Trustees may also amend the foundation's By-Laws, another measure of physician control.

Participating members are those physicians, either members of the state medical association or who are fully qualified for membership, who voluntarily apply for membership to avail themselves of foundation benefits. For 1971-72, no dues are charged for participating membership.

The MFMC will conduct an annual membership meeting in conjunction with the 104th Annual Session at which all participating members may vote. A full stewardship accounting will be made to the foundation membership.

For the first time this year the association is offering plenary sessions on socioeconomic topics of interest in addition to the regular scientific sections. On Tuesday, May 9, there will be a plenary session on the Mississippi Foundation for Medical Care and peer review at the Sheraton-Biloxi.

The Board of Directors of the foundation expresses its appreciation to the House of Delegates for supporting and assisting in the implementation of the foundation.

Experimental Medical Care Review Organization. The National Center for Health Services Research and Development (NCHSRD of HEW) has awarded the Mississippi State Medical Association a grant of $369,000 to develop a physician-sponsored method of "evaluating quality of medical care." The funding is effective June 30, 1971, through May 31, 1973. MSMA's only official obligation is to publish findings and results. The following paragraphs present a brief summary of the project, denoting the status as of March 1, 1972.

A. Staffing and Physical Facilities. The Mississippi EMCRO staff consists of five (5) full-time personnel; director, secretary, two senior review technicians, one review technician. Physical facilities are located in the headquarters building of Mississippi State Medical Association at 735 Riverside Drive, Jackson.

B. Establishment of Specialty Panels. The respective presidents of the following Mississippi component specialty societies have provided three member panels of physician specialists to aid in development of medical criteria in their respective specialty area:

(1) Mississippi Society of Anesthesiologists.

(2) Mississippi EENT Association (ophthalmology and otolaryngology).

(3) Mississippi Academy of General Practice.

(4) Mississippi Society of Internal Medicine.

(5) Mississippi Obstetrical and Gynecological Society.

(6) Mississippi Orthopaedic Society.

(7) Mississippi Association of Pathologists.

(8) Mississippi Chapter, American Academy of Pediatrics.

(9) Mississippi Psychiatric Association.

(10) Mississippi Radiological Society.

(11) Mississippi Chapter, American College of Surgeons.

(12) Mississippi Urological Association.

C. Development of Criteria. Inpatient criteria have been developed by the above mentioned specialty panels. Composite criteria received to date represent approximately 70 diagnoses. Criteria include considerations of appropriateness of hospital admission, appropriateness of services received while in the hospital, and appropriateness of the length of hospital stay. The criteria are in a format suitable for publishing.

D. Development of Computer Software. Software has been developed for the purpose of evaluating actual hospital discharge cases against the specialty-panel-prepared criteria. The software has been noted by both government and private sector sources as being unique in its capability of combining sophisticated review methodology with easily understandable narrative reports.

E. Leasing of Computer Hardware. An IBM 360/22 32K mainframe, two tape drives, three disk drives, card reader, card punch, and an optical mark page reader have been leased from the IBM Corporation and are being effectively used in conjunction with the above-mentioned software.

F. Selection of Review Physicians. Approximately five review physicians have been provided by each of Mississippi's 18 component medical societies. Each of these 90 review physicians has indicated agreement with the goals and methodology of the Mississippi EMCRO Peer Review system.

G. Active Peer Review. Items A. through F. have been successfully incorporated to provide true objective peer review of inpatient discharge cases from eight participating hospitals. The program has received enthusiastic verbal support from such varied sources as Medicare, Medicaid, JCAH, hospital administrators, and most significantly, from the Mississippi physicians whose practices of medicine are being reviewed.

H. Distribution of Educational Results. Educational results of the EMCRO program are being distributed on a weekly basis to the approximate 1700 physicians and 128 hospitals of Mississippi through the co-operative efforts of the Mississippi Hospital Association (MHA). Results contain both quality and cost comparisons and are distributed by MHA as a service to its membership at no cost to the EMCRO program.

As evidence of our competence and accomplishments, MSMA has been honored to have the director of the grant-awarding organization (National Center for Health Services Research and Development) visit us personally to review our EMCRO activities. As a result of Dr. Paul J. Sanazaro's visit, an EMCRO workshop was held in Jackson on February 21-22, 1972, enabling the Mississippi EMCRO to demonstrate its capabilities to all other national EMCRO organizations. The workshop was favorably received, lending credit to the National Center as coordinators and MSMA as host. It was a unique opportunity to proudly exhibit the image of medicine in Mississippi and to equally proudly exhibit a segment of Mississippi to the nation.

AMPAC. With the new MSMA computerized billing service for dues, AMPAC (American Medical Political Action Committee) has gained some 700 members for 1971. At the AMA-AMPAC Public Affairs Workshop held in Washington, D.C., the association won two first place and one third place membership awards. Mississippi won first in two categories: most dollars per physician and ratio of members to potential. The third place award was in all-events competition.

Appointments. Under the provisions of Section 1, Chapter VII, By-Laws of the association, the appointive powers are vested in the president. During the 1971-72 association year, President Brown made the following appointment which has the endorsement of the Board of Trustees.

(a) *Board of Trustees.* Following the resignation of Dr. James L. Royals of Jackson, District 5, Dr. Carl G. Evers of Jackson, District 5, was appointed to serve the unexpired term through 1974.

Organization of the Board. One new Trustee, Dr. Paul B. Brumby of Lexington, District 4, was welcomed to the Board during the 1971-72 year.

Officers of the Board during the year are Drs. J. T. Davis of Corinth, chairman; Everett Crawford of Tylertown, vice chairman; and James O. Gilmore of Oxford, secretary.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee is cognizant of the heavy responsibilities placed upon the Board of Trustees and commend them for their valuable contribution to the association. We recommend adoption of their report.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT A OF THE BOARD OF TRUSTEES

Committee on Medicine and Religion. On September 17, 1971, Drs. John M. Alford, Jr., of Greenwood, and William C. McQuinn of Jackson, met with Mrs. Maurine Twiss, Department of Public Information, University Medical Center, and with Mr. William F. Hoffman, Department of Medicine and Religion, American Medical Association, to discuss plans for a course for clergymen at UMC. The objective of the course is to enable the clergyman to gain more clinical knowledge through continued education in the areas of medicine and counseling.

A 10-12 week course costs approximately $1,500 based upon direct fees set for participating clergy and for reimbursement of faculty. Dr. Alford asked the Mississippi State Medical Association for an appropriation of one-third of the total estimated cost or $500, and Mrs. Twiss approached Dr. William O. Barnett, chairman, Committee on Continued Education, University Medical Center, for an allowance of $500. This leaves an estimated $500 to be picked up by the participating clergy or from some other source.

Dr. Alford presented the plan for the proposed course to the MSMA Board of Trustees at its Dec. 8-9 meeting. The Board took the following formal action:

"The Board *approves* the proposed course for clergymen at UMC under sponsorship of the Committee on Medicine and Religion and *appropriates* $500 in support funds for the project."

Mr. Hoffman, representing the AMA, reported that Mississippi will be the first medical association to create and work with such a program. He stated that we are making a significant breakthrough.

The Committee on Medicine and Religion held its last meeting on February 4, 1972, along with representatives of the University Medical Center and with representatives of the Mississippi Religious Leadership Conference to discuss a curriculum for the proposed course and to suggest plans for beginning the program at the start of the 1972 fall semester at UMC. Mr. William F. Hoffman, Jr., also attended the meeting.

At this meeting, Rabbi Perry Nussbaum asked that the state-wide Mississippi Religious Leadership Conference be represented and be given the opportunity of being a co-sponsor of the project. Our committee approved this request and agreed to add two additional clergymen to the four already appointed to participate in the planning stages of the curriculum. A curriculum sub-committee for the proposed course was appointed to draw up a course of study. At the time of this report, the sub-committee had reached no firm agreement.

The committee consists of five members. The chairman is Dr. John M. Alford, Jr., of Greenwood.

Board Luncheon. A luncheon honoring the Most Reverend Joseph B. Brunini for his service as a member of the AMA Committee on Medicine and Religion was held at Jackson, February 23, 1972. Our AMA Delegates, Drs. G. Swink Hicks of Natchez, and C. D. Taylor, Jr., of Pass Christian, were designated to represent AMA in the ceremony. Dr. John M. Alford, Jr., of Greenwood was also on hand to make the presentation of the engrossed plaque testifying to Bishop Brunini's leadership and humanitarian service.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee commends the Committee on Medicine and Religion for its excellent work and acknowledges its excellent report. We approve the report of the committee and recommend its adoption by the House of Delegates.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT B OF THE BOARD OF TRUSTEES

Legislative Activities. After the unsuccessful and difficult experiences in the 1970 Regular Session of the Legislature, the House of Delegates authorized a greatly expanded program of legislative activities as a major part of the overall program of expanded services. The House acted to provide financing and staffing for this endeavor and adopted specific instructions for its implementation under the Board's responsibility. The program was carried out by the Council on Legislation whose members have the commendation and appreciation of the Board of Trustees.

The new legislative program included regular and frequent communication to the membership, frequent meetings of the Council on Legislation, daily staff representation at the Capitol, close relationships with committees of the House and Senate considering health-related legislation, continuation and revitalization of the Emergency Medical Care Unit (EMCU), and a project to encourage greater physician participation in legislative affairs.

At its 103rd Annual Session, the House of

Delegates commended and applauded the 1971 legislative program of our medical association. This highly successful program was confirmed by the enactment of HB 71 introduced by the distinguished Speaker of the House of Representatives, Hon. John R. Junkin of Natchez, resulting from the dedicated work by the Council on Legislation.

Council and Staff. The Council on Legislation has conducted frequent meetings during the 1971-72 association year. The council met prior to the 1972 Regular Session and once a month during the session. On three occasions during the last session, the council met and entertained at dinner the Committee on Public Health and Welfare of the House once and the Committee on Public Health of the Senate twice. The Board was honored in having the Senate Committee on Public Health as guests for breakfast on April 20, 1972.

The council authorized the enactment of legislation as mandated by the House of Delegates at its 103rd Annual Session and of the unfinished business of previous programs. In addition, the council made decisions as to the need for and extent of formal representation on pending matters. Formal testimony was presented by physicians selected for their special knowledge and expertise. We filed position papers and wrote frequent letters on association positions. We had daily representation at the Capitol, and the communication with leaders of the House and Senate was close and frequent.

We also performed services for the legislature, making two major studies of charity hospitals and of the Sanatorium. We offered our Board Room as a meeting room for the House Committee on Public Health and secretarial services for the chairman were also provided.

During the 1971 Regular Session the executive secretary was authorized and instructed to initiate a special weekly newsletter, the "Mississippi Medical Legislative Report," since popularly called the "Blue Sheet." The four-page publication is issued weekly and is sent by first class mail to all members for receipt by Friday mornings. The Blue Sheet was again published during the 1972 Regular Session and proved to be an excellent media of communication between the Council on Legislation and the membership.

At its April 19-20, 1972, meeting the Board voted to continue the Blue Sheet on a weekly basis while the legislature is in session and to initiate plans to publish it on a monthly basis following adjournment of the legislature.

Of about 2,500 introductions, we followed approximately 165 bills with direct or indirect health and medical implications. About 100 bills were followed in the Blue Sheet with condensed narrative reporting on activities relating to health and medical legislation. A conscious effort was made by the council and executive staff to make the publication as medically oriented as possible.

EMCU. Our association was very fortunate in retaining the full-time services of Mavis Barlow, R.N., of Jackson as our staff nurse at the Emergency Medical Care Unit. Doctors-of-the-Day were signed up through the Blue Sheet, and January, February, and March were filled up completely. During the 125 day session, there were 1,423 patient visits to the unit at the time of this reporting. Each DOD was presented to the House and Senate by his home delegation.

MSMA 1972 Legislative Program. In addition to monitoring the overall health and medical introductions in the 1972 Regular Session, we have a six-point legislative program: (1) State Medical Examiner Act to provide for the establishment of an office of State Medical Examiner; (2) Licensure of child day care facilities; (3) Training program in family practice at UMC; (4) Support of capital improvement program for universities and UMC; (5) Lowering age consent to give blood to 18 from 21; and (6) To permit therapeutic abortion for medical reasons.

This session was highly successful in terms of passage of small bills which we supported. Not a single major bill opposed by the association was passed, although many good bills were lost.

The council, as mandated by the House of Delegates at the 103rd Annual Session, enacted legislation for the establishment of a State Medical Examiner who shall be a forensic pathologist. The bill was drawn up and introduced in the 1972 Regular Session. The measure was referred to the House Committee on Public Health and Welfare. It was reported out of committee some two months later. However, the bill died on the House calendar due to the large amount of appropriations which would be necessary to set up the system. A last minute effort was made to revise the entire bill and put the medical examiner under the State Board of Health to minimize appropriations, but this effort failed.

The House remembers the effort on the part of your association at the 1971 Regular Session to enact legislation for periodic licensure of child day care centers as set forth by the House of Delegates. Of course, this legislation was defeated last year in the Senate. This year we introduced the same legislation. Our bill was introduced along with two other similar proposals. As a result, our bill was not selected, but another proposal was

accepted which authorized the State Board of Health to regulate and license child day care centers to assure that minimum standards of cleanliness and safety are maintained. This bill passed both chambers easily and has been signed by the governor. The bill does not apply to kindergartens, nursery schools, Head Start Centers or other education-related facilities. This bill is a watered-down version of the MSMA sponsored bill.

The council introduced legislation lowering the consent to give blood to 18 from 21. In addition, two other very similar bills were introduced. Our bill and one of the other proposals have passed each chamber easily and have been signed by the governor.

We have campaigned diligently for funds for a training program in family practice at UMC. At the time of this report, the House Appropriations Committee is pondering over legislation to this effect. We feel like there is a good chance that the funds will come through. If they do, the University Medical Center will be committed to the establishment of a Department of Family Practice and of a residential training program by July 1, 1973.

We are not pleased with progress for capital improvement programs for universities thus far. A bill to authorize the construction of a clinical wing at the University Medical Center which would cost $3.5 million is still in committee. Capital improvement for universities has in general bogged down, not from lack of support but from the current attitude of House and Senate Appropriation Committees to tighten the rein on the amount of appropriations this session.

We acknowledge a major defeat in connection with our legislative program. The House of Delegates at the 102nd Annual Session adopted a resolution enacting legislation permitting an abortion when the pregnancy results from incest, when the pregnancy poses a threat to the health of the patient, and/or when in cognizant medical opinion, there is a probability that the infant will be born deformed. We introduced this legislation, but it was killed in the House Committee on Public Health and Welfare soon afterward, following intensive opposition, creating a high level of emotionalism.

Members of the House and Senate told our council and officers and Trustees that physician interest in legislation was substantial. They reported informed discussion with physicians at home and said that they appreciated this interest and advice and frequent communication. The Board emphasizes again that decisions on legislation are made at home in the representatives' and senators' districts with leadership and support in Jackson. But the Jackson activities alone cannot make a successful program.

Chiropractic Licensure. Chiropractic licensure is one of the few measures which your council opposed during the Regular Session. The chiropractic bill, HB 380, establishes a chiropractic board of examiners and included a grandfather clause licensing chiropractors already in the state. This proposal was received unfavorably by committee. However, a Committee Substitute for HB 380 was adopted by the committee and was passed by the House chamber on the third vote after being held on "Motion to Reconsider" two previous times. The Committee Substitute included: (1) Establishment of a chiropractic board of examiners; (2) Applicant must have graduated from a school recognized by the Mississippi Chiropractic Association; (3) Examination has to be approved by the Executive Officer of the State Board of Health; (4) Prohibited advertising; and (5) Prohibited referral to as "doctor." The Committee Substitute was referred to the Senate Committee on Public Health after its approval by the House chamber. Up to this point, there had developed obvious divisions within the ranks of your medical association and the chiropractic association. The Senate Committee on Public Health, in a statement to the Senate, recommended that further study and deliberation was needed and killed the proposal in committee.

Chiropractic legislation caused mixed emotions in the minds of the most intelligent and well-respected Senators and Representatives and even within the membership of our own association. We know that an overwhelming majority of our legislators would not be caught dead having a chiropractor treat them. However, it is noted that since Mississippi is one of only two states not licensing chiropractors, it has become a "dumping ground" for the cultists.

We do not deny chiropractic as a hoax and a cult which has no scientific basis. We do realize that the Mississippi legislators want to rid themselves of this year-in, year-out legislation by the next session once and for all.

1973 Program. Both the council and Board of Trustees recognize the unfinished business in our legislative program with new challenges in 1973. Mandates will come from the present annual session, and we will continue to need enactment of measures still on the agenda.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

We wish to commend the Council on Legisla-

tion on the work they did during the recent session of the Mississippi Legislature and the state headquarters from which communications went out to all members of the association. It was noted that for the first time through the use of computers legislators could receive information on the status of legislation from MSMA faster than from their own document rooms. It was also pointed out that the Blue Sheet issued by the state office was of much value to members of the association. We recommend approval of this supplemental report of the Board of Trustees.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT C OF THE BOARD OF TRUSTEES

Nurse Midwifery. The Board of Trustees referred the action of the House of Delegates approving a proposal on training and utilization of nurse midwives to the Council on Medical Education. The Board instructed the council to develop policies related to their training, function, and legal status. The council conducted two meetings and reported to the Board in December 1971. The December report contained summaries of the council's studies on the legal status of the nurse midwife, including opinions by the Attorney General of Mississippi, the Joint Commission on Accreditation of Hospitals, the Mississippi Hospital Association, and the University Medical Center.

Under date of September 27, 1971, the Attorney General of Mississippi rendered an opinion to the Mississippi State Medical Association on nurse midwifery. The opinion takes into consideration the training status and attainment of nurse midwives and also recognizes that those who are diploma graduates (diploma nurse) as well as degree nurses may be included in this practice definition and legal frame of reference. The following are salient points of the Attorney General's opinion:

(1) Section 8888, Mississippi Code of 1942, Recompiled, defines the practice of medicine, and together with Section 8887, authorizes the practice of midwifery. The Attorney General states that from these two sections alone, it would appear that midwifery could be practiced in a hospital by one not a physician, and this, essentially, is the basis of the Holmes County (CHIP) program. Although midwifery can be practiced in a hospital, the staff and hospital management (administrator and trustees) are responsible for the care and treatment of patients receiving the services of the nurse midwife just as if the treatment and care had been rendered under the usual circumstances with a physician in charge of the case.

(2) A nurse midwife enjoys no legal prerogative as to licensure beyond that of a registered nurse. The hospital, however, can impose stated professional and training minimums which could not be less than the standards required for nurse licensure. It must therefore be concluded that the nurse midwife does not enjoy any special legal status beyond that of the R.N. in the hospital, although the legality of her practice is recognized in statute.

(3) Neither a practicing physician nor a representative of hospital management may waive their responsibilities for care of the patient, regardless of any delegation of such care. Therefore, the nurse midwife may not, under existing procedures, admit a patient (independently of a physician) to a hospital. Both the medical staff and the hospital management are responsible for the standards of care rendered. The Attorney General further states that "the medical staff or physician responsible for admission of patients and approval of staff physicians, could not relieve himself of responsibility for care and treatment of patients admitted to the hospital as obstetrical patients if such standards were below those required for care and treatment of other patients." The care of a patient during hospitalization after delivery must meet criteria for care of all other patients, both as to hospital standards and statutory requirements of Mississippi. At the same time, the nurse midwife's responsibility would be the same as required of her in her licensed nursing capacity.

The Joint Commission on Accreditation of Hospitals applies the nurse midwife situation to policies promulgated in Bulletin No. 44, April 1967:

(1) The governing body of the hospital is responsible for care given to patients, and it delegates prime responsibility for the provision of all medical care to the jurisdiction of the organized medical staff which may include only qualified doctors of medicine or osteopathy (where the latter is licensed).

(2) The organized medical staff exercises responsibility in making recommendations to the governing body of the hospital for the granting of practice privileges.

(3) Doctors of dentistry (D.D.S.) may not be appointed to the medical staff but may be appointed to the dental staff or to the medical-dental staff when such form of organization is approved in the hospital's by-laws.

(4) The services of other allied health profes-

sions may be found proper and neeessary to hospital function and patient treatment. Such services may be made available by the granting of practice privileges to or the appointment to the hospital staff of members of other allied health professions within the scope of their lawful license to practice and their professional qualifications or technical skills. Recognition of these skills and the granting of privileges must be determined by the medical staff and recommended to the governing body, also within the scope of training and qualifications.

The matter of nurse midwifery practice in hospitals has been referred to the Mississippi Hospital Association, and the Board of Governors (Directors or Trustees) was scheduled to consider our program at its January Board meeting. We were officially informed that the hospital association approved the program of nurse midwifery as taught by the Department of Obstetrics and Gynecology of the University Medical Center.

In early October, Dr. Henry A. Thiede, professor and chairman, Department of Obstetrics and Gynecology, and Miss Marie Meglen, director of nurse midwifery programs, both of the University Medical Center, called on the Executive Secretary to confer over the program. Dr. Thiede and Miss Meglen emphasized the following points:

(1) The training of nurse midwives and nurse midwifery practice is a team effort which should be physician-led.

(2) It is presumptuous for any member of the team to make policies on nurse midwifery unilaterally. Such policy should be a conjoint, team effort.

(3) There is need for the services of the nurse midwife, and the team to guide her practice should be organized now to the end that the midwife can take care of normal patients with physicians interested in obstetrics caring for those considered not normal patients. There should be standing orders for nurse midwives, and these allied health professionals should also play a role in family planning services.

(4) Nurse midwives wish to be called by that name and prefer that the term "obstetrical assistant" not be used. They are certified by the American College of Nurse Midwives and desire this designation.

(5) The Mississippi team guiding nurse midwifery should consist of representatives from the Holmes County project, the State Board of Health (Miss Jelks and Dr. Wiygul preferred), Mississippi Hospital Association, Mississippi Nurses Association, State Board of Nurse Examiners (Miss Young recommended), University Medical Center, and Mississippi State Medical Association.

Finally, the Board of Trustees expresses deep appreciation to the Council on Medical Education for its unprecedented response to this vital need in behalf of the health of our state and the profession.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

We thank Dr. Tom Mitchell, Chairman of the Committee on Nursing, for attending our meeting and elaborating on the report. We recommend adoption of the report.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT D OF THE BOARD OF TRUSTEES

Summer Extern Program (MECO). In 1969, the Oxford-Lafayette Hospital pioneered in conducting a summer extern program with the in-institutional training of a Mississippi medical student. Critiques of this project showed promise and value, and a joint program for 1970 was organized among the University Medical Center and the state medical and hospital associations. The hospital association organized the program by communication with hospital management. The medical association communicated with chiefs of staff in the 128 member institutions of the hospital association, while UMC encouraged and assisted the Student American Medical Association chapter, comprised mostly of freshmen and sophomores, in program implementation. The two associations sponsored travel to the AMA Clinical Convention for the student chairman of the project, which has been designated by SAMA as "Medical Education—Community Oriented" or MECO. The SAMA MECO program originated four years ago in Illinois and has since expanded into 18 states.

The purposes of MECO are to afford the medical student clinical experience in the local medical community and to encourage him to remain in his state to practice upon completion of his training. Twenty-four hospitals participated in the 1971 summer program which offered structured training of 10 weeks duration for 40 Mississippi externs under the direct supervision of the medical staff.

Curriculum. Each hospital staff prepares its own 10 weeks training program. There is weekly rotation as the extern experiences exposure to all aspects of hospital service, but emphasis is

placed on clinical aspects of inpatient care. He is instructed in performance of routine procedures based upon the level of medical education and competency. Students are regarded as trainees, not mere part-time summer help or orderlies.

Where possible, the externs will follow individual patients and are permitted to make rounds with their preceptors. Specific members of the medical staff are identified to provide guidance for the extern. The program is flexible, and a portion is devoted to nonclinical aspects of the hospital, i.e., administration, medical records, community relations, and computer utilization. The sponsoring institution provides a stipend of $75 per week and makes arrangements for the extern's room and board.

Assignment of externs is made through a matching program of extern positions and applications from the students. The state medical association performed some staff work for the project and supported the SAMA committee; however, the students themselves have performed most of the necessary correspondence, administrative work, and all matching of applicants with hospital vacancies.

1972 Program. In approving the program to continue for the summer of 1972, the Board of Trustees made two recommendations. The Board requested that summer externs be assigned to a specific staff physician in each participating hospital. It was also suggested that some agreement should be signed by the extern with the hospital, assuring his participating in the program once he has been selected. Tom Greer, MECO 1972 chairman, reports that 33 hospitals are participating this year, an increase over 1971.

Observation. As a portion of the association's program of expanded activities, the Board of Trustees believes that there is merit in thc extern program both as to value in medical education and in encouraging our medical graduates to remain in the state. The Board feels that MECO is an example of constructive work among the state medical and hospital associations, physicians, students, and hospital administrators.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee considered the annual report of the MECO program, and we feel that there is much merit in the extern program both as to value in medical education and in encouraging our medical graduates to remain in the state. We would particularly like to commend Extern Bill Peters for his participation and constructive comments about the program at our committee hearing.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT E OF THE BOARD OF TRUSTEES

Committee on Medical Aspects of Driver Limitation. Early in the 1964-65 association year, the Mississippi Department of Public Safety formally requested the guidance, advice, and assistance of your association to "assist the Driver License Administrator in evaluating the individual applicant's physical and mental ability to operate a motor vehicle." It was clearly stated that the DPS earnestly desired to avoid and obviate the necessity of a private physician's having to make such a decision. The request was favorably considered by the Board of Trustees who, after making appropriate studies, appointed an *ad hoc* Committee on Medical Aspects of Driver Limitation consisting of nine members, one for each Highway Patrol district, representing those disciplines most frequently concerned with conditions associated with driver limitation. These include family practice, ophthalmology, otolaryngology, general surgery, orthopaedic surgery, internal medicine, neurology, and psychiatry. The committee has conferred extensively with the Driver License Administrator and his associates in the DPS. The Board of Trustees, appreciating that between 80 and 90 per cent of motor vehicle accidents are directly attributable to drivers, has deemed this opportunity one of great importance in contributing to highway safety.

The Board of Trustees concurred in the policy statement of the American Medical Association in this connection: "The AMA believes that physicians must assume leadership in the development of sound medical criteria for driver licensing. The diagnosis of medical conditions affecting the ability of an individual to operate a motor vehicle is the responsibility solely of the physician. The AMA believes that recognition and appropriate handling of driver limitation will contribute markedly to automobile accident prevention programs."

Mississippi Program. Working within the framework of guides developed, the committee has established criteria under which examination for possible driver limitation is recommended:

(a) When the license applicant displays an obviously impaired physical function.

(b) When a driver has been involved in multiple accidents within a short calendar period.

(c) When a driver must be placed in the assigned risk pool for insurance underwriting purposes because of refusal by various commercial carriers to assume his risk. *(Turn to page 376)*

Pinworm therapy is often a family affair





Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopeni malodor of the urine, crystalluria, hematuria; appearance of liv Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg

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so easy to take
everyone in the family
will keep to the
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clude: fever, facial flush, chills, conjunctival injection, gioedema, anaphylaxis, skin rashes, erythema multiforme cluding Stevens-Johnson syndrome), and lymphadenopathy.
upplied: Chewable tablets, containing 500 mg thiabendazole, boxes of 36, strip packaged, individually foil wrapped; uspension, containing 500 mg thiabendazole per 5 cc, in ottles of 120 cc.

r more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, ivision of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tab

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



The President Speaking

'Professional Standards Review Organizations (P.S.R.O.)'

CHARLES R. JENKINS, M.D.
Laurel, Mississippi

THE PURPOSE OF this page is to alert the practicing physicians of Mississippi to the dangerous and objectional features of P.S.R.O. Senator Wallace F. Bennett of Utah introduced this bill as an amendment to H.R. 1 (The Social Security Act of 1971) in January, 1972. This amendment has already been reported out favorably by the Senate Finance Committee and our friends in Washington say it will become law this year.

The Bennett Amendment is too lengthy for me to discuss all its provisions here, but its main purpose is to continually monitor every doctor's practice. This includes quality of care provided, utilization of services, fees charged, et cetera. Similar "supervision" of hospital activities is to be performed.

To implement this, the Secretary of H.E.W. is instructed, not later than January 1, 1973, to establish throughout the United States appropriate areas where P.S.R.O.s would be formed. As soon as an area is designated, then an agreement with a qualified organization would be made and this organization would be the P.S.R.O. for this region. This qualified organization may be (1) a non-profit professional association of licensed doctors of medicine or osteopathy or (2) such other public, non-profit private or other agency which the Secretary determines to be of professional competence.

The objections to this amendment are many, and I will list some of them: (1) The amendment delegates almost complete authority over the program to the Secretary of H.E.W. and does not appear to provide adequate avenues of redress or appeal for the individual provider. (2) The amendment effectively circumvents direct participation by state medical associations and will weaken the unity of established structures of organized medicine. Peer review mechanisms would be removed from medical association supervision. (3) The amendment allows H.E.W. to set up regional norms and standards for medical care that are subject to control by the National Professional Standards Review Council and thus subject to the possible imposition of national standards. (4) P.S.R.O., as proposed, would bypass our hospital staff utilization and review committees and our MSMA component society and state peer review programs. (5) The amendment gives the federal government, through the P.S.R.O. personnel, the authority to enter provider offices and evaluate equipment, records, and all services in connection with treatment of those individuals covered by federal health plans. (6) The amendment gives H.E.W. the authority to force the provider to reimburse programs for patient treatment deemed unnecessary by the P.S.R.O.

The implications of the Bennett Amendment are obvious. It would definitely erode the advocacy of state associations in behalf of medicine.

(Turn to page 360)

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

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AUGUST 1972

EDITORIALS

Parathyroid Adenoma Recognition Through SMA-12 Screening

In the 25 years from 1944 to 1969, not a single parathyroid adenoma was operated upon at Mercy Hospital, Vicksburg. Since installing an SMA-12/60 auto-analyzer in June, 1969, three parathyroid adenomas have been diagnosed and successfully removed. A fourth patient is considering surgical exploration of the parathyroid.

Prior to the advent of SMA screening, only those patients with nephrocalcinosis were investigated for parathyroid adenomas. The usual symptoms of hypercalcemia are varied and indefinite. Unless the patient develops nephrolithiasis, hyperparathyroidism is easily overlooked.

The diagnosis of primary hyperparathyroidism depends on the repeated findings of hypercalcemia and the exclusion of other causes of the elevated blood calcium. Any patient with a persistent blood calcium of over 12 mg per 100 mm should be carefully investigated for parathyroid adenoma.

The treatment of parathyroid adenoma is surgical removal. The parathyroid glands must be identified and abnormal glands removed. If hyperplasia is present instead of adenomatous change, removal of three of the four glands is indicated. Occasionally, repeated exploration of the parathyroid glands is necessary if hypercalcemia persists in spite of previous negative exploration. A sternal splitting exploration of the mediastinum may reveal an aberrant parathyroid adenoma.

The increased use of automated analyzers will undoubtedly reveal many patients with elevated blood calcium. Some of these will be mild (serum calcium less than 12 mg per 100 mm) and asymptomatic. It is debatable whether all of these should be subjected to parathyroid exploration. However, there will be others with unsuspected significant hypercalcemia in whom removal of a parathyroid adenoma will be of immense benefit.

GEORGE H. MARTIN, M.D., Associate Editor
Department of Surgery
The Street Clinic
Vicksburg, Miss.

The Population Dilemma

While it is trite to say that these times are unprecedented, this statement has never been more true. The complexity of our society and the social problems that confront us can only be appreciated in a general way and the solutions that we attempt may often only add to the problem.

While our technology can land us on the moon and return us to earth, little has man's relationship to man changed in history. Man is living closer to his brother with each passing day and while all of society's ills cannot be blamed on overpopulation, this is most certainly an aggravating factor. Too, isn't it equally important to consider the quality as well as the quantity of our population?

We who see a broad spectrum of our society in our practice are certainly more aware of this than many of our colleagues whose practices are more limited. It is high time that we as concerned physicians and responsible citizens agitate for government underwriting of free sterilization in those who desire, but are financially unable to afford, this procedure. We must, too, be concerned for those who are ill prepared both mentally and/or physically for parenthood.

The unwanted child as well as the mentally or physically impaired child can rarely be expected to make any contribution to society.

W. Moncure Dabney, M.D., Editor
Crystal Springs, Miss.

PRESIDENT *(Continued)*

The medical care foundation concept fulfills the requirements of the Bennett Amendment which state that the P.S.R.O.s must be open to all doctors of medicine and osteopathy in the area without regard to their membership in any other medical society or organization. The Mississippi Foundation for Medical Care, which is about one year old, offers the doctors of Mississippi the best opportunity to control their own destiny. As of now, only about 40 per cent of the MSMA members have joined. I urge you to enroll now and take an active part in this foundation. "United we stand; divided we will surely fall." ★★★

DEATHS

No reports of deaths of members of the association were reported to the Journal during the month of July 1972.

NEW MEMBERS

Chavez, Carlos Manuel. Born Lima, Peru, Dec. 25, 1932; M.D., Facultad de Medicina de San Fernando de la Universidad Nacional Mayor de San Marcos, Lima, Peru, 1956; interned Hospital Regional de Tacna, Lima, Peru, one year; residency in vascular surgery, Massachusetts General Hospital, Boston, Mass., 1960-61; residency in cardiovascular surgery, Methodist Hospital, Houston, Tex., 1961-62; fellowship in cardiovascular surgery, Methodist Hospital, Houston, Tex., 1963-64; Senior resident in general surgery, University Medical Center, Jackson, Miss., 1964-65; elected by Central Medical Society.

Evans, John Wesley. Born Gibson, Tenn., Jan. 19, 1938; M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1964; interned Methodist Hospital, Memphis, Tenn., one year; surgery residency, same, 1965-66; urology residency, 1966-69; elected by Northeast Mississippi Medical Society.

Johnson, William Cecil, Jr. Born Mobile, Ala., May 16, 1937; M.D., Tulane University School of Medicine, New Orleans, La., 1962; interned Navy Hospital, San Diego, Calif., one year; surgery residency, Navy Hospital, Portsmouth, Va., 1965-69; elected by East Mississippi Medical Society.

Runnels, G. O. Born Smith Co., Miss., Sept. 29, 1926; M.D., Medical College of Alabama, Birmingham, Ala., 1953; interned Mercy Hospital, Vicksburg, Miss., one year; general practice residency, South Mississippi Charity Hospital, Laurel, Miss., one year; psychiatry residency, Arkansas State Hospital, Little Rock, Ark., 1965-68; elected by South Mississippi Medical Society.

Wicker, Ralph Thomas. Born Winborn, Miss., July 17, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1963; interned Medical University Hospital, Charleston, S. C., one year; neurosurgery residency, same, 1964-66 and 1968-71; elected by South Mississippi Medical Society.

Book Reviews

Pathology. Volumes 1 and 2. By W. A. D. Anderson, M.D. Sixth Edition. 1862 pages with 1566 figures and 6 color plates. St. Louis: C. V. Mosby Co., 1971. $29.50.

This most recent edition of Anderson's pathology fully justifies the claims of the author in the preface:

"In this new edition of pathology, much of the content has been modified to include new knowledge and concepts in medical sciences. Significant progress in the fields of ultra-structure, cytology, genetics, immuno-pathology and biochemistry has led to a merging of the medical sciences among themselves and with biology."

The first chapter is a very comprehensive review of the ultrastructure of cells and their behavior and provides a basis of understanding for recent developments in this field using the electron microscope. The subject matter in the two volumes is too broad to be memorized, but together they provide an excellent source of information on general pathology for those physicians and students who need such a comprehensive reference at their fingertips.

My only criticism of this edition is that the index could be more complete. Terms in common use, such as "desmoid," are not present in the index. Aside from this, the book is highly recommended.

VAN B. PHILPOT, JR., M.D., Houston, Miss.

Arteriosclerosis (Volume II)—A Report by the National Heart and Lung Institute Task Force on Arteriosclerosis. 365 pages with illustrations. Washington, D. C.: Department of Health, Education and Welfare, publication no. (NIH) 72-219, 1971. $2.75.

This is a 365 page paperback report of the deliberations of one year's study of a National Heart and Lung Institute Task Force convened for the specified purpose of developing a long-range plan to combat arteriosclerosis. It encompasses an extensive survey of the present knowledge as well as ignorance concerning all phases of arteriosclerosis including such topics as atherogenesis, risk factors, diagnosis of presymptomatic atherosclerotic disease, management of overt atherosclerotic disease, and rehabilitation.

In contrast to its austere binding, the work is actually an excellent textbook written in a refreshingly brief, but factual, style. The format is similar throughout the volume. Beginning with a review of the present state of knowledge of each subject, it then moves to spell out unresolved problems and recommendations for research, clinical trials, etc. An excellent bibliography is furnished with each topic.

In addition there is a wealth of epidemiologic information which is displayed by a graph or diagram which should be useful for making slides, preparing discussions, etc. The report will be of tremendous value to anyone seriously interested in the problem of hardening of the arteries.

KENNETH R. BENNETT, M.D., Jackson, Miss.

Jackson Medical Clinic Planned

Plans for a modern medical clinic to occupy the vacant King Edward Hotel on Capitol Street in Jackson are being formulated by a group of Jackson physicians.

Dr. Willard H. Boggan, an internist, and the other involved physicians have researched and studied the idea for several months. They have now incorporated to facilitate planning.

Complete renovation of the old hotel would be required with plans calling for the diagnostic clinic to be modeled on the Ochsner Clinic in New Orleans.

Examination space, treatment rooms and all accompanying facilities would be provided for full-time physicians working in the clinic, with other Jackson and area physicians working part time in the new clinic.

At least two floors of the building would be furnished for housing relatives of patients in the clinic.

The purpose of the clinic, according to Dr. Boggan, is to relieve the hospital bed squeeze in the Jackson hospitals and to supply treatment for less serious cases at a lower cost. Dr. Boggan said the clinic would try to supply high caliber medical treatment to health and hospitalization insurance carriers.

Dr. Boggan said, "Jackson has had the best medical care available anywhere, and we hope to keep it that way with creation of this clinic, and at costs which most patients can afford."

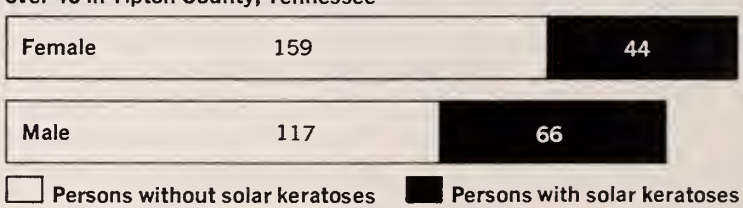
What it means to live and work i Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



Solar, actinic, senile keratoses

Called by many names, the typical lesion is flat or slightly elevated, brownish or reddish in color, papular, dry, adherent, rough, sharply defined; usually multiple lesions, chiefly on exposed portions of the skin.

Sequence/selectivity of response

Erythema in areas of lesions may begin after several days of therapy; height of reaction (only in affected areas)* usually occurs within two weeks, declining after discontinuation of therapy. Since this response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

Cosmetic results

Cosmetic results are highly favorable. Incidence of scarring is low—important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

5% cream–a Roche exclusive

Only Roche formulates the 5% cream... high in patient acceptability... high in clinical efficacy, especially for lesions of hands and forearms... economical.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

The Mississippi Postgraduate Institute in the Medical Sciences four-year program for family physicians moves into its fourth year this fall. Supported by the Mississippi Regional Medical Program, the institute grants postgraduate credit for attendance at one-week specialty intensive courses and elective seminars and scientific sessions. Registration in the one-week courses is limited to institute enrollees. Dates for additional courses will be announced.

September 18-22, 1972

NEPHROLOGY INTENSIVE COURSE
University Medical Center, Jackson
September 18-22, 1972, beginning at 8 a.m.
Sponsored by the University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
John D. Bower, M.D., associate professor of medicine, the University of Mississippi School of Medicine, and director, artificial kidney unit, the University of Mississippi Medical Center

This clinically-oriented course will stress the reversible and treatable forms of kidney disease, including an indepth presentation of management of acute kidney failure. Registrants will also study management of pyelonephritis, fluid and electrolyte problems and acid base balance, as well as hemodialysis in clinical nephrology.

October 16-20, 1972

GASTROENTEROLOGY INTENSIVE COURSE
University Medical Center, Jackson
October 16-20, 1972, beginning at 8 a.m.
Sponsored by the University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Lidio O. Mora, M.D., associate professor of medicine, the University of Mississippi School of Medicine, and chief, division of gastroenterology, the University of Mississippi Medical Center and the Jackson Veterans Administration Center

This one-week intensive course will feature management of conditions most commonly seen in office practice. Registrants will review endoscopy of all kinds, including rectal sigmoidoscopy, and attend lectures and ward rounds at both the Medical Center and the VA.

FUTURE CALENDAR

September 18-22, 1972
NEPHROLOGY INTENSIVE COURSE

October 10
CHEST DISEASE SEMINAR

October 16-20
GASTROENTEROLOGY INTENSIVE COURSE

November 3-4
SURGERY SEMINAR

November 6-10
OBSTETRICS INTENSIVE COURSE (TENTATIVE)

January 22-26, 1973
GASTROENTEROLOGY INTENSIVE COURSE (TENTATIVE)

March 7
RENAL SEMINAR

April 30-May 3
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

PERSONALS

THOMAS H. BLAKE of Jackson has retired as medical consultant for the Crippled Children's Services Unit, State Board of Health. Dr. Blake is an orthopaedic surgeon.

JOE DONALDSON has associated with The Children's Clinic, 876A Lakeland Drive in Jackson for the practice of pediatrics.

JOHN EVANS of Vicksburg served as principal consultant during the July "Drugs in Society" workshop at the University of Southern Mississippi.

Three new physicians have joined the active staff of the Rush Medical Group in Meridian. They are WILLIE E. GREER, pediatrics; JAMES C. MATTHEWS, JR., general surgery; and PAUL Y. VARELA, internal medicine and gastroenterology.

ROBERT J. HARGIS announces the opening of his office for the practice of urology at Hinds Professional Building, Suite 434, 1815 Hospital Drive in Jackson.

Charles M. Head and William H. Goodlowe, Jr., of Jackson announce the opening of their new offices for the practice of obstetrics and gynecology at Lakeland Drive, North Flowood Exit. The new mailing address is P.O. Box 5044, Jackson 39206.

G. Swink Hicks of Natchez has been honored in a resolution of appreciation and gratitude passed by the State Board of Health. Dr. Hicks served as a member of the board representing District 7 from 1966-1972.

W. Briggs Hopson of Vicksburg served as director of a symposium for physicians and nurses on care of the critically ill patient at Mercy Hospital. Other Mississippi physicians participating were James F. Arens and Robert Smith of Jackson, J. M. Ross, Jr., George H. Martin, D. T. Imrie, F. T. McPherson, R. F. Sharbrough, and C. W. Masterson, all of Vicksburg.

Robert Love of Greenville was recently named a trustee of the Southeastern Society of Plastic and Reconstructive Surgeons.

James Dan Massie has associated with the Radiological Group, P.A., at 316 Medical Arts Building in Jackson. Other group members are Elmer J. Harris, James M. Packer, Robert P. Henderson, Ottis G. Ball, and Clifton L. Hester.

John W. McFadden announces his practice limited to emergency room calls and house calls in Hattiesburg.

James N. McQueen and N. D. Feibelman, III, have associated with the Street Clinic in Vicksburg in the departments of dermatology and general practice, respectively.

Walter Neill of Jackson was guest speaker at the Capital City Kiwanis Club recently. Dr. Neill, a neurological surgeon, spoke on the highlights of his profession.

David M. Owen of Hattiesburg and Armin F. Haerer and Martin H. Steinberg of Jackson were among 266 physicians inducted as Fellows of the American College of Physicians at the annual meeting.

Gilberto Patino announces the opening of his new office located in State Line, Mississippi.

A. R. Perry and John R. Langlow announce the opening of the Natchez Eye Clinic at 453 John R. Junkin Drive for the practice of ophthalmology.

J. George Smith has associated with the Jackson Ear, Nose and Throat Clinic, P.A., for the practice of otolaryngology and maxillo-facial surgery. Other physicians in the group, located at 916 North State Street in Jackson, are Ralph Sneed, James D. Gordon, Howard B. Cheek, and Kenneth N. Reed.

Boyce Thomas has associated with Charles P. Tharp and M. M. Winkler, Jr., of Tupelo in the practice of pediatrics at the Infants, Children and Adolescent Clinic, 804 West Garfield.

George W. Truett has associated with the Central Orthopaedic Clinic, P.A., of Jackson, located at 421 S. Stadium Circle. He joins George D. Purvis, Thomas C. Turner, William B. Thompson, James O. Manning, and Guy T. Vise, Jr., in the practice of orthopaedic surgery.

Memphis RMP Gets Federal Grant

A Federal grant of $67,038 has been awarded to the Memphis Regional Medical Program to plan improvements in emergency medical services in West Tennessee and North Mississippi.

The grant was awarded by the Department of Health, Education and Welfare through the Regional Medical Programs Service as part of RMPS' increasing involvement in emergency medical services (EMS).

Dr. James W. Culbertson, coordinator of the Memphis RMP, said the new funds will be used to plan improvements in EMS activities in West Tennessee and North Mississippi by: giving assistance to officials in both states in outlining proposed EMS plans; and making a survey of existing emergency facilities and hospital emergency room procedures to determine what new training and equipment is needed.

Most of the planning activities will be conducted by a health planner, to be hired by the Memphis RMP to serve as a link between EMS committees in both states and to coordinate all other EMS activities of Memphis RMP, Dr. Culbertson said.

The survey of regional emergency training and procedures will be subcontracted to a team of leading emergency experts in the region.

When the survey is completed, the findings will be the basis of recommendations to be made to government leaders and health-care institutions.

New Sickle Cell Test Developed

The first on-the-site test for quickly and inexpensively distinguishing between persons with sickle cell anemia and those who carry the sickle cell trait has been developed by the Hyland division of Baxter Laboratories, Inc.

Sickle cell is primarily a genetic disorder among those of African descent. The more serious of its two forms is sickle cell anemia which afflicts an estimated 50,000 people, and usually results in death before the age of 30. A milder form, sickle cell trait, is carried by approximately one in 10 black Americans. Those with the trait can usually live a normal life, but can pass the disease on to their children.

Hyland's SICKLE I.D.™ test enables testers to determine within five minutes whether the person being tested carries the sickle cell gene. Within another three minutes, the test can determine which persons with positive tests have the disease, and which are only carriers of the trait. Genetic counseling can follow the test, enabling an entire screening program to be conducted during one visit to the testing site.

Other sickle cell screening tests currently available can identify those persons who carry the sickle cell gene, at the test site, but require extra laboratory testing of positive blood samples to determine disease or trait. This means that positive-tested persons have to wait at least overnight, and often two or three days before being recalled by the testing agency to learn their test results, and receive genetic counseling. The Hyland test virtually eliminates this traumatic waiting period and reduces the risk of lost contact, since the patient doesn't have to be recalled.

SICKLE I.D. kits are available in both 25 and 100 test sizes. All necessary testing components are included, with a special SICKLE VU™ illuminator and a centrifuge available as optional equipment in the total system.

In administering the test, a technologist pricks the person's finger and draws a drop of blood into the tube provided. The blood is then added to a buffer and powder mixture, mixed thoroughly by inverting the tube, and read through the SICKLE VU illuminator or similar light source. If the mixture is turbid so that the preprinted letter "A" on the tube cannot be seen, the person is positive. If the mixture is clear and the "A" can be seen, the person does not have a sickling disorder.

In cases of positive reading, the blood sample is then placed in a centrifuge, spun for three minutes, and read again. If the mixture is pink, with a small amount of precipitate at the base of the tube, the person carries the trait. If the mixture is clear, with a large amount of precipitate at the base, the person has the disease. The entire procedure takes only eight minutes.

For further information, write: Marketing Services Manager, Hyland Laboratories, Inc., 3300 Hyland Avenue, Costa Mesa, Cal. 92626.

PMA Traces Anti-Substitution Laws

"The Medications Physicians Prescribe: Who Shall Determine the Source?," a new Pharmaceutical Manufacturers Association booklet, has just been published. It reviews the background and purposes of laws and regulations that forbid pharmacists from filling prescriptions with products from sources different from those specified on the prescription, unless the doctor gives his approval.

Tracing the history of the laws, the booklet notes that strong opposition to unauthorized product substitution is long-established in both medicine and pharmacy. They were enacted, the booklet indicates, to inhibit the unapproved interchange of established "brands" and generics, as well as to reduce counterfeiting of drug products.

The laws have the overwhelming support of organized medicine and many in pharmacy for various reasons:

—There is now strong evidence of inequivalency among supposed equivalents of important medicines.

—Physicians alone are in a position to know both the patient's health problems and the drug products of possible value (and possible harm) to him.

—Evidence that savings would accrue to the patient if substitution were legalized is lacking, and available evidence indicates that consumer prices may rise under free substitution.

—Pharmacists would cause damaging friction with consumers and the medical profession were they to arrogate the product selection role for themselves.

PMA does not oppose pharmacist selection of the product to be dispensed, the booklet indicates, so long as it is done openly, and only with the consent of the prescriber. Once the individual pharmacist has earned the respect of the physicians with whom he practices, it concludes, the pharmacist can assume a major role in patient therapy, for the asking, under existing laws.

Copies of the booklet are available on request from PMA, 1155 15th Street N. W., Washington, D. C. 20005.

Mississippi Academy of Family Physicians Elects Officers, Holds Annual Meeting

Dr. Eugene F. Webb of Itta Bena was inaugurated president of the Mississippi Academy of Family Physicians at the 24th annual assembly and scientific session held July 13-15 in Biloxi.

Dr. William B. Hunt of Grenada, former secretary-treasurer, was elected president-elect. Immediate past president is Dr. James O. Stephens of Magee.

Other officers elected were Drs. Herbert H. Hicks of Natchez, secretary-treasurer, and Thomas J. Anderson of Laurel, vice president.



New officers of the Mississippi Academy of Family Physicians are from left: Drs. Herbert H. Hicks of Natchez, secretary-treasurer; James O. Stephens of Magee, immediate past president; Eugene F. Webb of Itta Bena, president; William B. Hunt of Grenada, president-elect; and Thomas J. Anderson of Laurel, vice president.

Dr. John B. Howell of Canton was re-elected to another two-year term as delegate. Dr. Charles R. Jenkins of Laurel has entered the second year of his two-year term. Alternate delegates are Drs. Joseph E. Johnston of Mt. Olive and Addison T. Tatum of Petal.

Members of the Board of Directors for five of the ten districts came up for re-election to two year terms. The following physicians are new directors: W. Boyce White of Laurel, District II, Robert E. Jennings of Taylorsville, District IV, Arthur E. Wood, Jr., of Belzoni, District VI, Richard L. George of Columbus, District VIII, and Jack A. Stokes of Pontotoc, District X.

New officers were installed by Dr. William E. Lotterhos of Jackson at the Friday evening banquet.

Scientific programs highlighted essays by guest lecturers on surgery for coronary artery disease, laboratory medicine, bacterial pneumonias, immunology, hypoglycemia, nuclear medicine, and infectious disease emergencies.

Teaching machines sponsored by Wyeth Laboratories were offered on office gynecology, thyroid disorders, liver function and dermatology for postgraduate credit. Scientific exhibits were also featured during the three-day annual meet.

Social occasions and recreation also highlighted the meeting for physicians and their families.

Connective Tissue Research Journal Begun

Publication of a new international journal, *Connective Tissue Research,* has been announced by Gordon and Breach Science Publishers, Inc., of New York City.

The aim of this journal is to highlight the most significant and original contributions in the field of connective tissue research; to relate the many facets of the subject; and to afford easier communication amongst those who wish to remain informed of current developments in the entire field while actively engaged in more narrowly focused studies, according to editor-in-chief Ines Mandl, Columbia University, N. Y.

Each volume will consist of four issues and in the U. S., the individual subscription rate is $14.50.

Subscriptions may be sent to Gordon and Breach, Science Publishers, Inc., 440 Park Avenue South, New York, N. Y. 10016.

AAP Urges VD Consent Laws

The American Academy of Pediatrics has called for uniform, non-categoric consent laws to permit adolescents having venereal disease to obtain comprehensive care without the consent of their parents.

In a statement appearing in the AAP's *Newsletter,* the Academy's Committee on Youth emphasizes that privacy and confidentiality are essential in the successful care of young people, particularly those with venereal infection.

"Management must be accompanied by dignified, considerate care in which there is a nonjudgmental, concerned attitude," the committee points out. "The development of trust between the teen-age patient and the physician must be fostered if efforts in epidemiologic control, counseling, and education are to be successful."

The Committee on Youth further emphasizes that an increasing number of states are permitting the treatment of venereal disease of minors without the consent or knowledge of their parents or sponsors. Difficulties may arise when this legal provision is not available, "although these difficulties are more often surmised than actual."

In its statement, the Academy calls attention to the fact that although reporting a venereal infection to public health authorities is mandatory in every state, this has not in itself led to reliable and consistently available data. The AAP cautions that these laws or regulations have not facilitated effective public health measures necessary to reduce the further spread of venereal infection.

"Public and professional apathy and reluctance contribute to this dilemma," the Academy statement maintains. "Conversely, a reputation for zealous reporting or investigation inevitably results in the unwillingness of patients to come in for treatment."

Gonorrhea is now the most common, reportable communicable disease and syphilis is the third. An estimated 2,500,000 cases of gonorrhea and 80,000 cases of syphilis occur yearly, according to the Academy.

"A close interpersonal liaison between the physician caring for youth and public health professionals must take place to safeguard the rights of the individual teen-ager and achieve effective control of further spread of the disease," the AAP statement indicates.

The Academy underscores the physician's responsibility in caring for teen-agers to counsel and educate those with venereal disease, as well as other young people he sees who do not have the disease but who should have access to accurate information. "The young patient's experience with venereal disease provides the pediatrician with an opportunity to make available counseling support directed toward strengthening psychosexual development and stability," the AAP states.

"Whenever possible, the resumption and reinforcement of positive communication between parents and teen-agers should be encouraged and constantly sought, although the illness and related matters should remain a private matter between the physician and patient," the Academy concludes. "The physician must attempt to establish a continuing health care arrangement which includes preventive measures and assistance with educational and employment planning."

Dr. McRae Chosen Alumni President-elect

Dr. John M. McRae, Jr., of Laurel was elected president-elect of the Ole Miss Medical Alumni Chapter at the annual meeting.



Dr. McRae

A native of Lexington, Dr. McRae received his M.D. degree from Harvard Medical School in June of 1956. He completed internship and a general surgery residency at the University Hospital in Jackson.

He completed his military service with the U. S. Navy. After practicing two and a half years in Greenville, Dr. McRae began practice in Laurel.

He is a diplomate of the American Board of Surgery and a member of the South Mississippi Medical Society, Mississippi State Medical Association, and American Medical Association.

Currently serving as alumni president is Dr. Bobby F. King of Iuka and immediate past president is Dr. J. Dan Mitchell of Jackson. Mr. Bill Price is alumni secretary.

The medical alumni office is located on the campus of the University Medical Center in Jackson, and the annual meeting is held in May each year in conjunction with the MSMA annual session.

SMA Ophthalmologists Plan Section Meeting

The Section on Ophthalmology of the Southern Medical Association will hold its 1972 meeting in New Orleans, Nov. 13-16.

Papers are now being accepted for presentation at this meeting. For further information, contact Dr. Hilliard M. Haik, Section Secretary, 812 Maison Blanche Building, New Orleans, La. 70112.

Interstate Postgraduate Assembly Set

The 57th Annual Scientific Assembly of the Interstate Postgraduate Medical Association will be held at the Washington-Hilton Hotel, Washington, D. C., Nov. 13-16.

This program, primarily designed for family physicians and internists, is an educational service providing a diversified lecture program, "live" television, medical motion pictures and panel discussions. Special symposia on "Diabetes," "Pediatric Problems in Office Practice," "Urinary Infections," "Hypertension" and "Anemia" are included in the program.

Faculty members of George Washington, Georgetown and Howard medical schools will provide major portions of the instruction.

Guest speakers include Drs. Walter F. Ballinger, St. Louis; Daniel H. Mintz, Miami; Rubin Flocks, Iowa City, Iowa; C. Barber Mueller, McMaster University, Hamilton, Ontario; Edward D. Freis, VA, Washington; Ray W. Gifford, Jr., Cleveland; Douglas G. Cameron, McGill University, Montreal; Paul H. Curtiss, Jr., Columbus, Ohio; Carroll M. Leevy, Newark; Robert H. McDonald, Pittsburgh; Edward F. Rabe, Boston; Robert E. Cooke, Baltimore.

The meeting is open to any licensed M.D. in the U. S. or Canada. The fee is $25 for 26 hours of instruction, which provides credit for members of the American Academy of Family Practice who attend.

Those interested in further details and registration forms should write to Dr. Alton Ochsner, Program Chairman, Interstate Postgraduate Medical Assn., P. O. Box 5445, Madison, Wis. 53705.



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UMC Lists Faculty Changes

Eleven faculty members have been named to the University of Mississippi School of Medicine full-time teaching staff, eight at the assistant professor level and three as instructors.

Radiology assistant professor Dr. Bernard Blumenthal holds the B.A. degree from Lafayette College in Pennsylvania, the M.S. and M.D. from the University of Mississippi School of Medicine. He interned at Mercer Hospital in Trenton, N. J., and did a residency at the Graduate Hospital of the University of Pennsylvania.

Dr. Larry A. Doke, assistant professor of psychiatry (psychology), earned the B.A. from the University of Missouri, the M.A. and Ph.D. from the University of Kansas. Prior to his appointment, he was a professor at the University of Veracruz in Mexico.

Appointed in July, Dr. Clarence S. Mast will join the faculty in September as obstetrics and gynecology assistant professor. A Texas Technological College graduate, Dr. Mast holds the M.D. from Johns Hopkins University School of Medicine. He interned and did a residency at Strong Memorial Hospital in New York.

Dr. Patricia Moynihan, who received the M.D. from the University of Mississippi School of Medicine, is assistant professor of surgery. She interned at University Hospital in Jackson, where she was a resident. She completed her specialty training at Johns Hopkins.

A native of Cairo, Egypt, Dr. Mahmoud A. S. Shaalan is new clinical laboratory sciences assistant professor. He holds the M.D. and Ph.D. degrees from Cairo University, where he was an intern, resident and faculty member. Dr. Mahmoud was also a resident and fellow at the University of Pennsylvania Hospital.

Dr. Francis M. Donovan, Jr., is assistant professor of physiology and biophysics. The Mississippi State University graduate holds the M.S. from Virginia Polytechnic Institute and the Ph.D. from Purdue University. He has taught on the faculties of Virginia Polytechnic Institute, Louisiana State University and the University of Utah, where he was assistant research professor just prior to his Medical Center appointment.

Pharmacology assistant professor Dr. Glenn Gatipon earned the B.S. degree at Tulane University. He also holds the M.S. and Ph.D. from Louisiana State University. Before joining the Mississippi institution's staff, Dr. Gatipon was instructor of pharmacology at Louisiana State University Medical Center in New Orleans.

In other faculty changes, Dr. Gaston Rodriguez advanced from medicine instructor to assistant professor. Former pathology clinical professor Dr. Erica Elizabeth Ferrington is now pathology associate and Dr. Wilton Marsalis moved from part-time to full-time status as anatomy instructor.

Added in at the instructor level were Miss Marjorie Maureen Jones, surgery (otolaryngology); Dr. James A. Joransen, pediatrics; Dr. Michael W. Kendall, anatomy; and Dr. Arthur David Collins, pathology.

Rhinologic Society and LSU Plan Program

The American Rhinologic Society and Louisiana State University School of Medicine will present workshops and seminars in respiratory physiology, rhinomanometry, and corrective nasal surgery Sept. 19-21 in New Orleans.

Faculty will consist of members of the American Rhinologic Society and the LSU School of Medicine. Guest professor is Dr. Maurice H. Cottle, professor of otorhinolaryngology, Chicago Medical School.

Drs. Gerald F. Joseph and Anthony Failla, both clinical professors of otorhinolaryngology at LSU, are course director and coordinator respectively.

The American Rhinologic Society will hold its eighteenth annual meeting on Sept. 22 at the Marriott in New Orleans.

For information or registration, write Dr. Gerald F. Joseph, 3622 Government Street, Baton Rouge, La. 70806.



Dr. Tatum Assumes AHA Presidency

Dr. Frederick E. Tatum of Hattiesburg was elevated to the presidency of the Mississippi Heart Association during its annual assembly held in Jackson. The practicing internist has served the voluntary health agency as president-elect, vice president, secretary and member of the Board of Directors.



New president of the Mississippi Heart Association is Dr. Frederick E. Tatum of Hattiesburg.

The new president is a past-president of Forrest County General Hospital's medical staff, a Kiwanian and a member of the Century Club of William Carey College.

Other officers of the association are Aven Whittington of Greenwood, president-elect; Dr. William L. Wood, Jr., of Tupelo, vice president; Charles W. Holt of Hattiesburg, secretary; and Ray R. McCullen of Jackson, treasurer.

Intestinal Parasite Seminar Planned

The University of South Carolina will sponsor a "South-wide Symposium on Human Nematode Intestinal Parasites," Nov. 30-Dec. 1 in Atlanta, Ga.

For further information, contact James W. Follette, Project Assistant, Malnutrition and Parasite Project, 002 Maxcy College, University of South Carolina, Columbia, S. C. 29208.



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Dr. John Rawson Receives SMA Grant

Dr. John E. Rawson of the department of neonatology at University of Mississippi School of Medicine, Jackson, has been awarded a research project grant by Southern Medical Association (SMA).

The 20,000-member physician group annually supports medical research by awarding grants to initiate projects or continue relatively new studies.

Dr. Rawson was one of 20 researchers, selected from more than 100 applicants, to receive an SMA research grant this year. The grant will help to fund Dr. Rawson's project, Factors Influencing Cerebral Blood Flow in Newborn Puppies.

The Research Project Fund, established in 1969, is one of several SMA programs that support the organization's exclusive purpose of developing and fostering scientific medicine.

Based in Birmingham, Ala., Southern Medical Association is comprised of physicians from 16 southern states and the District of Columbia. This year the organization will hold its 66th annual meeting, the second largest conclave of medical science in the nation, in New Orleans, Nov. 13-16.

ACCP Begins Professor in Residence Program

A Professor-in-Residence program designed to bring teaching and consulting assistance in pulmonary medicine to community hospitals and to medical schools without pulmonary departments has been established by the American College of Chest Physicians, Chicago.

Bradford W. Claxton, M.Ed., director of continuing education of the Chicago-headquartered, 9,000-member ACCP, said the new program will be administered by the College's Committee on Postgraduate Medical Education. Pulmonary specialists will be invited by the committee to act as teacher/consultants for two- and three-day "residencies" at participating institutions.

The visiting professors will furnish written reports upon completion of individual sessions. Upon request each professor will also evaluate respiratory care facilities in the institution. Program costs will be absorbed by the ACCP through an educational grant made to the organization by Breon Laboratories.

Medical schools and community hospitals interested in participating in the Professor-in-Residence program should write to: American College of Chest Physicians, Department of Continuing Education, 112 E. Chestnut Street, Chicago, Ill. 60611.

Questionnaires will be forwarded to institutions requesting program participation. Completed questionnaires will be evaluated by the Committee on Postgraduate Medical Education to establish priority assignment priorities for the guest professors, Mr. Claxton said.

AMA Sponsors Congress on Occupational Health

The American Medical Association will sponsor the 32nd annual Congress on Occupational Health Sept. 11-12 at the Drake Hotel in Chicago.

The congress program is acceptable for 12 elective hours by the American Academy of Family Physicians.

There is no registration fee and further information may be obtained by writing Congress on Occupational Health, AMA, 535 North Dearborn Street, Chicago, Ill. 60610.

AABB Studies Blood Bank Fees

The cost of blood to hospital patients has increased far less than the cost of medical care in general, according to an extensive, original survey conducted by the country's largest organization devoted exclusively to blood banking and blood transfusion services.

The nationwide study, "Fees and Replacement Policies of Institutional Members of the American Association of Blood Banks," was conducted by Mrs. Bernice M. Hemphill, treasurer of the AABB and executive director of the Irwin Memorial Blood Bank in San Francisco, in consultation with Mr. Maurice Gershenson, a noted economist and statistician.

The study published in *Transfusion,* the scientific journal of the AABB, shows that while the medical care component of the Bureau of Labor Statistics Consumer Price Index shot up more than 43 per cent since 1960, the average cost of a unit of blood increased by only 13.6 per cent.

At the time of the study, the AABB reported an institutional membership of 1,330 facilities with a total annual blood usage of 5,713,718 units (pints). The bulk of the study came from information supplied by 781 member banks that levied a nonreplacement fee for blood which is not replaced by friends or relatives of patients, and a processing fee for the cost of collecting, processing and distributing blood.

Of the 781 banks participating in the study,

677 charged a nonreplacement fee and 596 charged a processing fee. A comparison of the fees reported in this study (based on data from 1968 to 1970) against those reported in the last AABB study shows that since 1960 the mean processing fee per unit increased 37.6 per cent, from $9.17 to $12.62. The mean nonreplacement fee rose 3.7 per cent, from $22.46 to $23.60. The combined mean processing and nonreplacement fees totaled $35.92 per unit, an increase of only 13.6 per cent over the $31.63 reported for 1960.

"While the fees for the two periods are not precisely comparable in a strict technical sense," Mrs. Hemphill said, "it can be reasonably concluded that the charges for blood by AABB institutional members increased considerably less than the rise in total medical costs."

Mrs. Hemphill also noted that the nonreplacement fee charged to patients receiving blood is the single most important reason why voluntary donors give blood since the fee is refunded or credited to patients upon receipt of blood donations or pre-established donor credits. "Friends and relatives of patients come in and donate blood so the patients won't have to pay the nonreplacement fee which in many cases is not covered by health insurance."

In commenting on the study, Dr. William G. Battaile, president of the AABB, agreed that many donors would never have given blood if there had been no nonreplacement fee. "The greatest single difficulty in blood banking is getting a sufficient number of Americans to donate their blood voluntarily. Only three to five per cent of those eligible actually donate now. Since the human body is the only source of blood, and since no one can be forced to donate, the elimination of the nonreplacement fee would seriously diminish the already short supply of voluntary donors. When voluntary blood is unavailable, hospitals have no other choice but to administer blood from paid donors. This increases the risk of hepatitis significantly.

"The only reason this 'bought blood' exists at all is the shortage of volunteer blood. Anything which contributes to this shortage increases the risk to the patient. In our opinion, the nonreplacement fee is an important donor recruitment incentive in increasing the supply of voluntary blood donors."

Mrs. Hemphill also noted that many banks use the nonreplacement fee to subsidize their operating costs in order to keep their processing fees at a minimum. "Thus, patients who support their blood program through voluntary blood donations are able to receive blood at less cost than those who make no effort to predeposit blood or to recruit voluntary blood replacements," she said.



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First came CANDEPTIN (candicidin) Tablets for intravaginal use. Then CANDEPTIN Ointment to treat labial involvement and for intravaginal use. Now unique **CANDEPTIN VAGELETTES**—candicidin ointment in soft gelatin capsules—extend the range of CANDEPTIN therapy to even your pregnant and virginal patients (you merely cut off the narrow tip and extrude the contents through the intact hymen).

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Significantly more potent *in vitro* than nystatin.[5] CANDEPTIN Tablets and Ointment have shown clinical cure rates of 90% and higher in both pregnant and non-pregnant patients.[1,4,6] And in recent studies of **CANDEPTIN VAGELETTES** Vaginal Capsules involving both pregnant and non-pregnant patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Only CANDEPTIN gives you a dosage form for every therapeutic need, plus *eight years' clinical proof* of potency. Consider CANDEPTIN for your next vaginal moniliasis patient.

CANDEPTIN®
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Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: 1. Olsen, J.R. Journal-Lancet 85: 287 (July) 1965. 2. Giorlando, S.W.: Ob/Gyn Dig. 13: 32 (Sept.) 1971. 3. Decker, A. Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. 90: 370 (Oct. 1) 1964. 5. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H.J.: Maryland M.J., 15:36 (Feb.) 1966.

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Berkeley Bio-Engineering Expands

Berkeley Bio-Engineering, Inc., manufacturer of tonometric, obstetric, and gynecologic instruments, has announced several major changes made recently in its organization of regional managers. These changes include the establishment of a new regional office, as well as the appointment of seven new regional managers.

The new regional office for the Tennessee, Arkansas, Louisiana, and Mississippi area will be headed by Mr. Dennis Hoffman. This new office will extend Berkeley's regional distribution organization to cover the entire continental United States, with a total of 13 regional offices.

For information on Berkeley's complete product line and the area distributor, contact: Mr. Charles Shambaugh, Sales Manager, Berkeley Bio-Engineering, Inc., 1215 Fourth Street, Berkeley, Cal. 94710.

Dr. Freeland Named Allied Health Dean

Dr. Thomas E. Freeland is the first dean of the state's first School of Allied Health.

Appointed at the June meeting of the Board of Trustees, Institutions of Higher Learning, Dr. Freeland began his duties at the University Medical Center July 1.

Medical Center director Dr. Robert E. Blount said the new University of Mississippi School of Allied Health will coordinate health-related college level educational programs such as medical technology, medical record administration and dental hygiene. Physical therapy training will be added in the near future, he said.

The new dean has been deputy director of the Allied Health Professions Project in the Division of Vocational Education at the University of California at Los Angeles, where he was also visiting associate professor.

Dr. Freeland, a 32-year-old Pennsylvania native, majored in health education at Lock Haven State College in his home state. He earned the M.A. at Long Beach State College and the Ph.D. at the University of Southern California, where he taught for four years beginning in 1965.

Dr. Freeland is a member of the Association of Schools of Allied Health Professions, American Association of Health, Physical Education and Recreation, and American Vocational Association. His primary interests are task analysis, curriculum development, work physiology and manpower utilization.

(d) When a driver voluntarily suggests that he blacked out or that medical problems contributed to an accident.

The committee, after review and study of other similar programs, particularly those in Florida, North Carolina, and Ohio, devised both a recommended procedure and an examination form. When a determination has been made by the DPS that medical examination of an applicant or licensee should be made in accordance with medically-established criteria and guides, the form is given to the individual under these instructions:

(a) Driver license applicants who must undergo medical examinations are asked to consult their personal physicians who are private practitioners and the applicant is given the clear understanding that a professional fee will be charged for the service.

(b) The examining physician is asked to report only his medical findings. He is neither asked nor required to state or certify whether the applicant is qualified to operate a motor vehicle or not. This determination is made in accordance with law by the Department of Public Safety with advice from the state committee.

Driver Limitation. Our committee met at Jackson on February 10, 1972, with representatives of the Department of Public Safety and with one representative of the Mississippi Safety Council. The purpose of the meeting was discussion of driver licensure problems in Mississippi and its relation to this medical advisory committee.

A representative of the Department of Public Safety stated that in Mississippi this year already there has been a 36 per cent increase in highway fatalities over 1971. At the present time, the department is operating with only 30 driver license examiners over the state which definitely handicaps personnel in what they can and cannot do. The representatives of the DPS advocated the medical association's support for legislation concerning compulsory re-examination and increased personnel for the Department of Public Safety.

The representative of the Mississippi Safety Council has worked diligently in the past to set up some kind of medical advisory committee to the Department of Public Safety and has continually supported legislation which makes it harder to become a licensed driver and easier to have a license revoked. He emphasized that the primary reoccurring problems in Mississippi are: ineffective enforcement of laws and lack of re-examination of licensed drivers.

Our committee made special reference to the discrepancy which occurs in some instances between the medical decision of a physician who serves on this advisory committee and the Department of Public Safety with respect to an applicant's physical condition. Our committee compiled a report which showed approximately 10 per cent of all cases reviewed by the committee lacked coincidence between the decision of the physician and the Department of Public Safety. The committee has requested that the Department of Public Safety make every effort to obtain additional medical information at the request of a member of this medical advisory committee.

The committee related some problems specifically which exist with driver licensure in Mississippi. Among these are such concerns as:

(1) The role function of the judiciary in the determination of certain driver license applicants. Reports indicate that court orders have given the license of a person back after this committee had previously reported that the driver was medically unable to drive.

(2) The development of effective enforcement of driver license related laws. Too frequently, the opportunities for improvement are negligible due to inadequate personnel or lack of incentive for providing needed enforcement.

(3) The expansion of the role of the physician to ensure that his talents and capacities are fully used. It is not unusual for physicians to feel that they are not encouraged to apply needed medical judgment to the capabilities of their patients.

(4) The avoidance of legislators to concentrate their efforts on making a driver's license hard to get, but easy to lose. The point-system of revoking a driver's license in Mississippi is no longer closely followed. It is estimated that 70 per cent of the licensed drivers have no tickets in their file, 20 per cent have one ticket, and 10 per cent have more than one ticket in their file.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee commends the report of the *Ad Hoc* Committee on Medical Aspects of Driver Limitation, and we commend these nine (9) physicians who have been working with the Mississippi Safety Council and the Department of Public Safety in the recommendations as presented in this report. We request that the Board of Trustees refer this to the Council on Legislation for early endorsement in the 1973 Regular Session of the Legislature.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT F OF THE BOARD OF TRUSTEES

Long Range Planning. The Committee on Long Range Planning consists of five members appointed for terms of five years each and so arranged to provide for appointment of one member annually. The committee shall receive its charges from the Board of Trustees. The chairman of the committee is Paul B. Brumby of Lexington. The major requirements of this committee are to make recommendations and assess developments to achieve maximum effectiveness in all association activities.

Prior Meeting. The first formal meeting of the Committee on Long Range Planning during the 1971-72 association year was at the Headquarters Building, Jackson, on February 23, 1972. The committee was presented with a report on the growth and expansion of the association. It was agreed upon by the committee to investigate the possibility of acquiring a land site on the University Medical Center Campus if further expansion was necessary. The committee did not want the association located in the center of the UMC Campus or adjacent to the Ole Miss Medical Alumni Association. The committee agreed that a site on Lakeland Drive close to the St. Dominic-Jackson Memorial Hospital would be the best location for a new association building.

Closing Remarks. The committee will continue to work with the Board of Trustees in making any plans for future expansion and development of association activities.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee appreciates the time and effort devoted to future plans for expansion of the association and recommends adoption of this report.

The report of the reference committee was adopted.

REPORT OF THE SECRETARY-TREASURER

Dr. Raymond S. Martin: Duties and Responsibilities. As an elected general officer of the association, your Secretary-Treasurer is charged with such duties as ordinarily devolve upon the secretary of a corporation by law, custom, and usage. Additionally, he is the constitutional designee to serve as chairman of the Council on Scientific Assembly and member *ex officio* of all councils and committees.

Membership. There was a slight decrease in our membership during 1971 over preceding years. The total as of December 31, 1971, was:

1,313 paid Active members (in contrast to 1,349 members Dec. 1970)
69 Emeritus members
51 members exempt from dues other than Emeritus

This is a total of 1,433 for 1971. Our unified billing system which also generates permanent records for our component medical societies has greatly assisted in dues collection for 1972. As of April 15, 1972, our current years membership was:

1,221 paid Active members
52 Emeritus members
50 members exempt from dues other than Emeritus

This is a total of 1,323 for 1972. Additional payments of dues have been made since preparation of these data, and there are 90 unpaid members who were in good standing in 1971.

MISSISSIPPI STATE MEDICAL ASSOCIATION CONDENSED STATEMENT OF FINANCIAL CONDITION DECEMBER 31, 1971

ASSETS

Current Assets		
General Fund		
Cash on Deposit	$154,629	
Accounts Receivable, JOURNAL Advertisers	3,752	
Accounts Receivable, CHAMPUS	7,438	
Other Receivables	2,055	
Prepaid Expenses	313	$168,187
Fixed Assets		
Building and Equipment, Less Depreciation	189,186	
Land	14,242	203,428
Other Assets		
Deferred Medex Data Expense	865	
Deferred CHAMPUS Expenses	$ 4,346	
Refundable Deposits	203	5,414
Total Book Assets		$377,029

LIABILITIES AND NET WORTH

Current Liabilities		
Accrued Expenses	$ 4,274	
AMA Dues Payable	79,640	
Pending Dues Payable	150	
Mortgage Payable	4,450	
Accrued Taxes	9,889	
Accounts Payable, U. S. Government	932	
Society Dues Payable	6,849	
MPAC & AMPAC Dues Payable	3,980	
Auxiliary Dues Payable	4,126	$114,290
Long Term Liabilities		
Mortgage Payable	71,200	
Deferred Income	80,895	152,095
Net Worth		110,644
Total liabilities and net worth		$377,029

Fiscal Reporting. In accordance with usual practice, your Secretary-Treasurer submits a condensed statement of your association's financial condition as reported by the Board of Trustees independent certified public accountant. The

Council on Budget and Finance prepared the budget for 1972 which was approved by the Board of Trustees, and a copy is attached to this report. This is exclusive of funds which will be expended by the association in payment of claims under the Civilian Health and Medical Program of the Uniformed Services. Such expenditures are reimbursed to the association by the Department of Defense.

Constitutional Duties. Your Secretary-Treasurer, as an *ex officio* member of councils and committees, meets with various official bodies of the association and sits with the Board of Trustees as a general officer. Activities related to service as chairman of the Council on Scientific Assembly are reported separately.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee appreciates the report of Dr. Raymond S. Martin, Jr., the Secretary-Treasurer of the association. It has been noted by members of the committee that there has been a drop in membership and we feel that this could be rectified by additional diligence on the part of the vice presidents and secretaries of the local medical societies. We recommend adoption of the report of the Secretary-Treasurer.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON BUDGET AND FINANCE

The 1971-72 association year was the first year that the Council on Budget and Finance consisted of five members, providing a broader base of financial management.

The council met in November 1971 and prepared the 1972 budget which was presented to the Board of Trustees in accordance with established procedures. The fiscal program shall have been reviewed by the Board in April, and the budget will be presented to the House of Delegates in the customary manner.

Both the Council on Budget and Finance and the Board of Trustees are grateful for the cooperation of the House of Delegates.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee commends Dr. George Purvis for the years of diligent service he has given this council and expresses appreciation for the report of the council. We recommend that the report of the Council on Budget and Finance be adopted.

The report of the reference committee was adopted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. H. Cody Harrell, Acting Executive Secretary: As the association's activities and programs continue to grow, additions have been made to the executive staff. At the present time there are 25 employees at the Headquarters Building. The new EMCRO program is responsible for six of these employees. The EMCRO program has gained national recognition for its achievements. Your CHAMPUS program continues to grow at a rate of ten per cent a year. There are now seven full-time employees in this department. Your OCHAMPUS program is rated fifth in the nation for overall performance. At the present time, we have six of our employees enrolled in a medical terminology class and one in an economics class. We have encouraged our employees to continue their education in related fields pertaining to their work.

The staff is grateful for the cooperation we have received from the Board of Trustees, general officers, council and committee members, and the secretaries of the medical societies.

In closing I would like to express my personal gratitude to the physician members of the association for helping me to carry out the official policies as set forth by the Board of Trustees and the House of Delegates.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

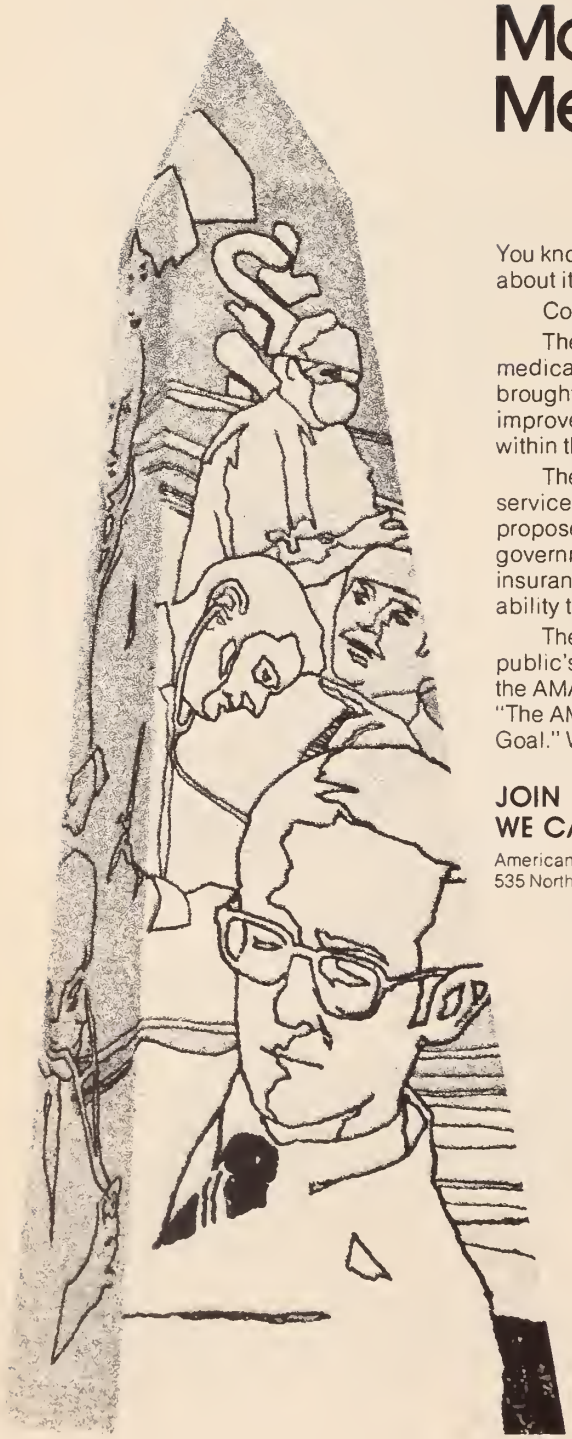
Your reference committee expresses appreciation to the acting executive secretary for his report and compliments him on the excellent job he has done under most extenuating circumstances. Your committee also expresses appreciation to the staff who so ably assisted him in making preparations for this annual session, to the staff in attendance at this annual session, and to the executive secretary of the Central Medical Society for contributing much to the success of the 104th annual session. We recommend adoption of the report of the acting executive secretary.

The report of the reference committee was adopted.

REPORT OF THE COMMITTEE ON AMA-ERF

Dr. Raymond F. Grenfell: Organization and Duties. Your Committee on the American Medical Association Education and Research Foundation is an *ad hoc* body of the House of Delegates. Our duty is to encourage members of the association and Woman's Auxiliary to support AMA-ERF with voluntary, tax-deductible con-


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Monolithic Medicine.

You know only too well what it would mean. You're concerned about it. And you wonder who's protecting your interests.

Contrary to what you may think, the AMA.

The AMA has vigorously opposed a government controlled medical system. And our testimony before Congress has brought results. Today key legislators acknowledge that improvement of health care can be best accomplished within the framework of our present system.

The AMA is acutely aware that more and better health service must be delivered to the public. To do it, the AMA has proposed a number of programs. One is Medicredit, a government supported program of voluntary national health insurance. It would insure every American—regardless of his ability to pay—of obtaining quality medical care.

The AMA is working hard to protect your interests and the public's. But we need your support. Find out more about what the AMA is doing for you and the public. Send for the pamphlet, "The AMA and the American Doctor: Sharing a Common Goal." Write: Dept. DW, at the address below.

JOIN US.
WE CAN DO MUCH MORE TOGETHER.

American Medical Association
535 North Dearborn Street/Chicago, Illinois 60610

tributions. Every dollar received goes to medical education or research, and the donor may earmark his gift for a particular institution of his choosing. Unearmarked gifts are equally distributed among all accredited four-year medical schools by AMA-ERF. No administrative expense or cost of fund solicitation is taken from gifts: The AMA and state medical associations pay the modest costs of conducting the program.

1971 Program. Last year, our total gift to the University of Mississippi School of Medicine and Medical Center was $10,820.30. A decrease from the 1970 figure, the amount reflected a national decrease of about 20 to 30 per cent among the states.

1972 Program. The current campaign was initiated in the fall of 1971 with mailings from the medical school and association. The University of Mississippi Medical Alumni Association fulfills a key leadership role in the campaign, and your committee works in concert with the alumni association. Additionally, appeals are made through the JOURNAL MSMA.

Our total gift in April 1972 was $11,470.52, an increase from 1971. This sum represents $8,991.67 from physicians and Auxiliary members in earmarked funds and $2,478.85 in undesignated foundation funds distribution. Mississippi's per capita gift level remains high in comparison with other states.

With the second year of the association's unified billing system, an opportunity was again given members to include AMA-ERF gifts with dues payments. The billing statements were mailed after the solicitation campaign was conducted, but we received $1,540.00 with dues payments. Most of these gifts are not included in the total reported, thereby increasing our contribution.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

We approve the report of the Committee on AMA-ERF (American Medical Association-Educational Research Fund). In particular do we commend Dr. Raymond F. Grenfell, chairman, and his colleagues for the inclusion of the Woman's Auxiliary and the Mississippi Medical Alumni group in the implementation of this excellent program and for the fine job that his committee has done during 1971 and 1972.

The report of the reference committee was adopted.

AUXILIARY OFFICERS

The Speaker presented Mesdames T. E. Ross, III, of Hattiesburg, 1971-72 President of the Woman's Auxiliary to the Mississippi State Medical Association, and Clarence H. Webb, Jr., of Jackson, 1972-73 President, who addressed the House of Delegates.

1972 MSMA-ROBINS AWARD

President Brown presented the 1972 Mississippi State Medical Association-Robins Award to Dr. Reginald P. White of Meridian for outstanding community service by a physician. Mr. Phil Taylor from the A. H. Robins Company assisted Dr. Brown in the presentation.

SCIENTIFIC EXHIBIT AWARD

Dr. Raymond S. Martin, Jr., of Jackson, chairman of the Council on Scientific Assembly, presented the Aesculapius Award, an engraved wooden plaque, to Drs. Thomas L. Kilgore, Jr., and James C. Griffin, Jr., of Jackson for the best scientific exhibit by a member or members of the association, "Aorto-Coronary Bypass Surgery for Relief of Angina Pectoris."

The second award in this category, also an engraved plaque, was presented to Drs. Charles E. Farmer, Jr., Jack B. Campbell, and Edward M. Lowicki of Jackson for their exhibit, "Evaluation and Treatment of Obstructive Vascular Lesions."

The Mississippi State Medical Association Scientific Achievement Award, a bronze medallion, given for the best scientific exhibit by nonmember, out-of-state guests, was awarded to Drs. Charles W. Pearce, White E. Gibson, III, and Rudolph F. Weichert, III, of New Orleans for their exhibit "Coronary Arteriosclerosis-Surgical Treatment."

Dr. Martin announced that certificates of merit would be presented to all scientific exhibitors and each would be awarded 10 hours of continuing education credit. He expressed appreciation for the 36 (paying) technical exhibits at the 104th Annual Session.

RESOLUTION NO. 1, IN MEMORIAM

Dr. Raymond S. Martin, Jr.: WHEREAS, There are absent from among our numbers 38 members who have been called by Divine Providence since the 103rd Annual Session; and

WHEREAS, Although we are grieved by the passing of these beloved colleagues and friends, we are inspired by their lives of service and professional attainment; and

WHEREAS, This expression of our grief, deep affection, and respect should be recorded permanently among official records of the Mississippi State Medical Association, now therefore, be it

Resolved, That this House of Delegates does mourn the passing of the following esteemed colleagues:

Julian T. Bailey, Meridian, November 27, 1971
Stanford E. Bethea, Hattiesburg, October 25, 1971
John A. K. Birchett, Vicksburg, January 24, 1972
Karl A. Bolten, Jackson, April 10, 1972
Leon H. Brevard, Marks, June 24, 1971
George A. Campbell, West Point, October 29, 1971
L. J. Clark, Sr., Vicksburg, February 6, 1972
Shed H. Davis, Calhoun City, December 31, 1971
John L. Dorough, Temple, Georgia,
Albert W. Dumas, Jr., Jackson, May 7, 1971
Silous C. Ferguson, Meridian, October 14, 1971
Richard J. Field, Sr., Centreville, May 19, 1971
Tucker Y. Fleming, Minter City, August 24, 1971
Warren C. Fulton, Aberdeen, January 11, 1971
Billy S. Guyton, Oxford, May 16, 1971
Frank S. Hill, Greenwood, June 26, 1971
Jay J. Kazar, Tchula, December 13, 1971
Henry J. Kellum, Jr., Tupelo, February 25, 1971
Felix E. Linder, Oxford, April 11, 1972
James H. Lipsey, Brookhaven, November 16, 1971
Hugh B. Magill, Jr., Biloxi, August 18, 1971
William F. Pohl, Meridian, January 8, 1971
M. M. Powell, Sr., Coldwater, June 18, 1971
Rollo H. Robinson, New Albany, July 26, 1971
Elise M. Rutledge, McComb, February 9, 1972
James E. Safley, Brookhaven, July 11, 1971
R. T. Searcy, Cleveland, May 24, 1971
Arthur H. Smith, Sumner, July 3, 1971
Carl A. Smith, Jr., DeKalb, March 25, 1972
William K. Stowers, Natchez, April 4, 1972
Augustus Street, Vicksburg, December 3, 1971
Norman W. Todd, Newton, January 26, 1972
Nelson O. Tyrone, Prentiss, February 4, 1972
Ben N. Walker, Sr., July 1, 1971
James T. Weeks, Mt. Olive, June 26, 1971
Presley E. Werlein, Biloxi, October 22, 1971
William T. Wilkins, Clarksdale, February 1, 1972
George M. Wilson, Gulfport, January 16, 1971

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution No. 1 was acted upon without referral and adopted by the House of Delegates with all present standing in silent tribute.

RESOLUTION NO. 2, LEGISLATION TO PROHIBIT CHIROPRACTORS

Dr. Samuel B. Johnson: WHEREAS, The Chiropractors have been practicing in the State of Mississippi without official sanction for at least twenty-eight years, and

WHEREAS, Chiropractors are not scientific providers of health care, now, therefore, be it

Resolved, That the Central Medical Society, a component chapter of the Mississippi State Medical Association, does hereby authorize its Executive Committee to negotiate with the Attorney General of the State of Mississippi to introduce proper and fitting legislation to prohibit this cult from acting as a scientific provider of health services, and be it further

Resolved, That a similar resolution be introduced to the Mississippi State Medical Association for consideration at their Annual Meeting, which will be held in May of 1972, to support this effort and to provide the necessary legal advice as may be deemed necessary.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee considered Resolution No. 2 which prohibits chiropractors from practicing in the state as scientific providers of health services.

We recommend the approval of the following substitute resolution:

WHEREAS, The Chiropractors have been practicing in the State of Mississippi without official sanction for at least twenty-eight years, and

WHEREAS, Chiropractors are not scientific providers of health care, now, therefore, be it

Resolved, That the Mississippi State Medical Association does hereby authorize its Board of Trustees to negotiate with the Attorney General of the State of Mississippi to introduce proper and fitting legislation to prohibit this cult from acting as a scientific provider of health services.

The report of the reference committee was adopted.

RESOLUTION NO. 3, REGULATION OF CHIROPRACTORS

Dr. Jack A. Stokes: WHEREAS, For years the chiropractic lobby has tried in vain to acquire statewide recognition and licensure, and

WHEREAS, For years the state medical has opposed any and all legislation pertaining to licensing or regulating chiropractic, and

WHEREAS, Chiropractic has thrived and grown and prospered in the absence of any state regulation or restriction, and

WHEREAS, This growth of this unscientific cult of chiropractic continues to defraud the public of thousands of dollars and interferes with continuing good medical care, and

WHEREAS, The state legislature has expressed its desire to settle this recurring problem by passing a regulatory bill in the House, now tied up in the Senate Committee awaiting definite action next year, and

WHEREAS, Several state legislators have expressed the opinion they need and welcome the state medical's advice and counsel in writing this legislation, now, therefore, be it

Resolved, By the Northeast Mississippi Medical Society at its March 1972 meeting that the society request the state medical association to consider taking a positive course of action in writing and working actively for passage of a bill regulating the practice of chiropractic in the state of Mississippi encompassing the following:

1. Elimination of the use of x-ray by chiropractors.
2. Eliminate the use of advertising as a means of defrauding the public.
3. Eliminate the use of the title of Dr. on which many chiropractors capitalize.
4. Make chiropractors who advise patients to quit taking important medications (insulin, digitalis, antihypertensives, antibiotics, etc.) guilty of practicing medicine without a license and subject to penalties therefor.
5. Require registration of chiropractors with the State Board of Health at no charge.
6. Oppose the formation of a board of chiropractors.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This resolution points out the need for the Mississippi State Medical Association to take a positive course of action in writing and working actively for passage of a bill regulating the practice of chiropractic in the State of Mississippi encompassing certain provisions. We approve the concept of taking a positive course of action but believe there should be further consultation with the Attorney General's Office of the State of Mississippi and the Mississippi State Board of Health.

Your reference committee recommends that Resolution No. 3 be not adopted.

The report of the reference committee was adopted.

RESOLUTION NO. 4, IMPROVING THE CENTRAL OFFICE OF THE AMERICAN MEDICAL ASSOCIATION

Dr. Stanley A. Hill: WHEREAS, The American Medical Association is losing membership, and

WHEREAS, Many state societies have withdrawn the mandatory unit membership, and

WHEREAS, There are rumors of discontent among the staff at headquarters in Chicago, and

WHEREAS, It appears that more money is being spent than is necessary, and

WHEREAS, Not only the nation and the public but every medical doctor benefits from AMA, and

WHEREAS, The standardization and upgrading of medical education by the association is one of its many worthwhile accomplishments, and

WHEREAS, There may be need for improving the administration and making the association stronger, now, therefore be it

Resolved, That the Mississippi State Medical Association recommends that a management consultant firm be employed to make a survey of AMA Headquarters and report to the 1972 Clinical Session.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee had the benefit of informed and enlightened discussion on Resolution No. 4 which proposes that a management consultant firm be employed to make a survey of the AMA Headquarters and thereby improve the administration and make the association stronger. Your reference committee approves the proposal as set out in the resolution.

The report of the reference committee was adopted.

RESOLUTION NO. 5, EXPRESSION OF APPRECIATION

Dr. C. G. Sutherland: WHEREAS, In September 1950 Rowland B. Kennedy was employed as the first Executive Secretary of the Mississippi State Medical Association, and

WHEREAS, Since 1950 the association has more than doubled its membership, and

WHEREAS, In 1960 Rowland became Managing Editor of the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION and under his management that publication has received many awards for excellence, and

WHEREAS, Rowland has recently resigned his position as Executive Secretary of the Mississippi State Medical Association after more than twenty-one years of service to the medical profession, and

WHEREAS, The medical profession wishes to duly recognize Rowland's service as Executive Secretary of the Mississippi State Medical Association and to record this recognition in the annals of our local and state medical societies, now, therefore, be it

Resolved, That the Central Medical Society does hereby commend and express deep appreciation to Rowland B. Kennedy for his loyal and outstanding service to the medical profession, and be it further

Resolved, That the House of Delegates of the Mississippi State Medical Association at its 104th Annual Session, Biloxi, May 8-11, 1972, does

commend and express deep appreciation to Rowland B. Kennedy for his loyal and outstanding service to the medical profession as Executive Secretary of the Mississippi State Medical Association.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee heartily endorses the resolution of appreciation to Mr. Rowland B. Kennedy who most efficiently and loyally served as executive secretary of our association for twenty-two years.

We recommend an amendment to the resolution to provide that the Council on Constitution and By-Laws seek appropriate changes in our Constitution and By-Laws that will allow us to recommend an Honorary Membership in our state medical association. In our deliberations it was the consensus of the reference committee that Mr. Kennedy be made an Honorary Member of the Mississippi State Medical Association, but in counseling with the speaker and vice speaker we find that our Constitution and By-Laws do not provide for this category of membership.

The committee further recommends that Mr. Kennedy be presented with a plaque at an appropriate time.

We recommend adoption of Resolution No. 5 as amended.

The report of the reference committee was adopted as amended.

RESOLUTION NO. 6, PEER REVIEW

Dr. Whitman B. Johnson, Jr.: WHEREAS, We are vitally concerned about the quality of medical care and its review by our peers, and

WHEREAS, There is a constant need to improve the quality of medical care, and

WHEREAS, There is some question as to the legality of review of fees, which in reality is a contract between physician and patient and a separate contract between patient and insurance carriers, now, therefore, be it

Resolved, That the Clarksdale and Six Counties Medical Socicty disapproves of the Peer Review program of the Mississippi State Medical Association as presently constituted and recommends that this problem be reviewed.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee considered this resolution and heard extensive discussion over the concept of peer review. We approve the concept of the Peer Review Committee as set forth by the House of Delegates, and we are also vitally concerned with the improvement of the quality of medical care.

We recommend the approval of the following substitute resolution:

WHEREAS, We are vitally concerned about the quality of medical care and its review by our peers, and

WHEREAS, There is a constant need to improve the quality of medical care, now, therefore, be it

Resolved, That the Board of Trustees of the Mississippi State Medical Association direct necessary legislation to be drafted and introduced in the next regular session of the Mississippi Legislature to provide legal sanction for the Committee on Peer Review of the Mississippi State Medical Association.

Mr. Speaker, your reference committee recommends approval of the resolution as amended.

The report of the reference committee was adopted as amended.

RESOLUTION NO. 7, ALTERATION OF MEDICAL PRACTICE ACT

Dr. C. D. Taylor, Jr.: WHEREAS, The Mississippi State Medical Association has been historically opposed to chiropractic and all other forms of cultism, and

WHEREAS, There have been repeated attempts by such cultists to be recognized by legislation or regulation, and

WHEREAS, The legislature is now willing to attempt to provide a bill that would be in the best interest of all concerned, and

WHEREAS, There are loopholes in the Medical Practice Act that prevent proper prosecution of chiropractors as practitioners of medicine, now, therefore, be it

Resolved, That the Mississippi State Medical Association work with the legislature to alter the Medical Practice Act to make all practitioners of "the Healing Arts" pass the same examination or make chiropractic illegal.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee considered Resolution No. 7 which alters the Medical Practice Act to make all practitioners of "the Healing Arts" pass the same examination or make chiropractic illegal. We approve such an alteration, but we feel consultation should be had with the Attorney General's Office of the State of Mississippi and the Mississippi State Board of Health before any solution is considered.

Your reference committee recommends that Resolution No. 7 be not adopted.

The report of the reference committee was adopted.

RESOLUTION NO. 8, HEALTH INSURANCE FOR NEWBORN INFANTS

Dr. Wilfred Q. Cole, Jr.: WHEREAS, The preponderance of people with health insurance in Mississippi do not have coverage for either hospitalization or physician care for newborn infants, and

WHEREAS, Health insurance coverage for newborn infants for the first 14 days of life is an insurable risk, and

WHEREAS, The public generally is of the opinion that health insurance covers newborn infants during these early days, and

WHEREAS, This coverage represents a very real need for most persons of childbearing age, and

WHEREAS, The occurrence of congenital anomalies and neonatal illnesses poses an economic burden on parents which can be disastrous, now, therefore, be it

Resolved, That the Mississippi State Medical Association recommend enactment of legislation for the inclusion of complete coverage for newborn infants in every policy written with maternity benefits in this state.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee approves Resolution No. 8, Health Insurance for Newborn Infants, and requests that the Board of Trustees refer this to the Council on Legislation for early introduction in the 1973 Regular Session of the Legislature.

The report of the reference committee was adopted.

RESOLUTION NO. 9, INFORMATION EXCHANGE WITH TRAVELERS MEDICARE

Dr. Richard E. Schuster: WHEREAS, There appears to be a great number of differences between the medical profession and Travelers Medicare, and

WHEREAS, There is a need to exchange information and to establish a good working relationship between the intermediary, Travelers Medicare, and the medical profession of Mississippi, now, therefore, be it

Resolved, That there be appointed a committee to work with Travelers Medicare to establish information concerning policy changes, values, charges, and treatment of patients between the two organizations, and be it further

Resolved, To determine if there has been or if there is presently a difference in treatment of physicians for services rendered in different parts of the state of Mississippi in regard to payments by Travelers Medicare.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

Your reference committee considered Resolution No. 9 which expresses a need to exchange information and to establish a good working relationship between the intermediary, Travelers Medicare, and the medical profession of Mississippi.

We recommend the approval of the following substitute resolution:

WHEREAS, There appears to be a great number of differences between the medical profession and Travelers Medicare, and

WHEREAS, There is a need to exchange information and to establish a good working relationship between the intermediary, Travelers Medicare and the medical profession of Mississippi, now, therefore, be it

Resolved, That the Board of Trustees of the Mississippi State Medical Association work with Travelers Medicare to establish information concerning policy changes, values, charges, and treatment of patients between the two organizations.

In discussion, Dr. S. L. Bailey of Kosciusko suggested that all other third party carriers or providers should also be included.

Dr. Jack A. Atkinson of Brookhaven moved, second Dr. Myron W. Lockey of Jackson, that where the substitute resolution reads Travelers Medicare, "all third party purveyors of medical care" shall be substituted, and in the last sentence of the Resolved clause, "Between the two organizations" should be changed to read "between them and physicians."

Dr. C. D. Taylor, Jr., of Pass Christian moved, second Dr. C. R. Jenkins of Laurel, that the House vote on the substitute to the substitute.

The report of the reference committee was adopted as amended.

OFFICIAL ATTENDANCE

The official attendance was announced as being 751 to include 372 physicians, 178 members of the Woman's Auxiliary, 101 exhibitors, 65 guests, 27 residents, interns and medical students, and 8 staff.

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Conduct of Business. Your reference committee commends the Speaker and Vice Speaker for

the outstanding manner in which they have conducted business before this House of Delegates. We believe that all members will wish to associate themselves in this expression of appreciation and we add to that our regret that Dr. William E. Lotterhos is leaving Mississippi. He will be greatly missed by our association. We wish for him every success in his new endeavor in the State of Georgia.

Resolution. The reference committee desires to offer the following resolution for consideration by the House of Delegates:

WHEREAS, The 104th Annual Session of the Mississippi State Medical Association has been conducted at Biloxi, Mississippi during the period May 8-11, 1972, and

WHEREAS, The annual session has been most profitable and enjoyable for all who have been in attendance, now, therefore, be it

Resolved, That expressions of deep appreciation are made to the officers, Trustees and Council on Scientific Assembly for the stimulating and worthwhile scientific programs; to the management of the Sheraton-Biloxi for splendid services, to other participating hotels and motels, to the press, radio and television for coverage of our activities, to the gracious ladies of the Auxiliary who always contribute so substantially to our meetings, to the technical exhibitors and their professional service representatives, to our scientific exhibitors who have contributed to our learning and instruction, to our distinguished guests, particularly Dr. Wesley W. Hall of Reno, Nevada, President of the American Medical Association, and to all who have shared in the responsibilities of planning, organizing and conducting this great annual session.

Your reference committee recommends adoption of this resolution.

The report of the reference committee was adopted.

SPECIAL REQUEST

Prior to the election of officers, Dr. Lotterhos stated: "Due to an emergency I would ask your permission to appoint Dr. Stanley A. Hill of Corinth to be the Speaker in my absence for the rest of this session. If you have no objection, he will substitute for the rest of the session."

By unanimous consent, Dr. Hill assumed the Speaker position for the remainder of the House session and Dr. Lotterhos was excused.

REPORT OF THE ELECTION OF OFFICERS

President-elect: Arthur A. Derrick, Jr., Durant.

Vice Presidents: Lee H. Rogers, Tupelo; James P. Spell, Jackson; and Wendall B. Holmes, McComb.

Speaker: John B. Howell, Jr., Canton (1975).

Vice Speaker: Walter H. Simmons, Jackson (1975).

Editor: W. Moncure Dabney, Crystal Springs (1974).

Associate Editor: George H. Martin, Vicksburg (1974).

Delegate to AMA: Joseph B. Rogers, Oxford (1974).

Alternate Delegate to AMA: Arthur E. Brown, Columbus (1974).

Board of Trustees: Gerald P. Gable, Hattiesburg, District 7; Everett Crawford, Tylertown, District 8; and James T. Thompson, Moss Point, District 9 (1975).

Council on Budget and Finance: J. Dan Mitchell, Jackson (1975); and David L. Clippinger, Gulfport (1975).

Council on Constitution and By-Laws: Tom H. Mitchell, Vicksburg (1975).

Judicial Council: James E. Booth, Eupora, District 4; Samuel B. Johnson, Jackson, District 5; and Charles M. Moore, Philadelphia, District 6 (1975).

Council on Legislation: C. D. Taylor, Jr., Pass Christian, District 9; Everett Crawford, Tylertown, District 8; and A. T. Tatum, Petal, District 7 (1975).

Council on Medical Education: Dennis E. Ward, Corinth (1975).

Council on Medical Service: John F. Lucas, Jr., Greenwood, District 1; John R. Lovelace, Batesville, District 2; and Jack A. Stokes, Pontotoc, District 3 (1975).

CONSTITUTION AND BY-LAWS

At the close of business, no amendments to the Constitution or By-Laws were pending.

CLOSING CEREMONIES

There being no further business, the Speaker returned the gavel to President Brown. The Oath of Office was administered to Dr. Charles R. Jenkins, the President-elect, by Dr. J. T. Davis, Chairman of the Board of Trustees, after which Dr. Jenkins addressed the House of Delegates.

Dr. James Grant Thompson of Jackson presented the Thompson Memorial Past President's Pin to Dr. Brown.

The House of Delegates was adjourned *sine die* at 4:05 o'clock in the afternoon, May 11, 1972.

SPECIAL MEETING OF THE MISSISSIPPI FOUNDATION FOR MEDICAL CARE

The chair declared adjournment of the House of Delegates for the first annual meeting of the Mississippi Foundation for Medical Care. Dr. Millard S. Costilow of North Carrollton, MFMC president, assumed the chair and called the meeting to order at 2:15 p.m. on Thursday, May 11, 1972. After a brief address on Foundation objectives by Dr. Costilow, Mr. H. Cody Harrell, Acting Executive Secretary, announced the members of the Board of Directors of the Foundation. The meeting was adjourned at 2:30 p.m.

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Index to Advertisers

American Medical Association 378B
Beecham-Massengill Pharmaceuticals 369, 371, 373
Burroughs Wellcome 338A
Dow Pharmaceuticals 14B
Geigy Pharmaceuticals 14A
Hill Crest Hospital 18
H. M. G. Company 12
Hospital Affiliates, Inc. 14
Kay Surgical, Inc. 19
Eli Lilly and Company front cover, 18D
Merck, Sharp and Dohme 356, 357
MPAC 19
Pharmaceutical Manufacturers Association 18A, 18B, 18C
Wm. P. Poythress and Company 8
Roche Laboratories second cover, 3, 10, 11, 15, 16, 17, 362, 363, fourth cover
Julius Schmid, Inc. 374, 375
G. D. Searle and Co. 346B, 346C, 346D
Stuart Pharmaceuticals 346A
The Upjohn Company 6, 7, 338B, 338C, 338D
Winthrop Labs 378A
Woodward Academy 14
Thomas Yates and Company third cover

IN CONCLUSION

Physicians may carry over unused fee increases from year to year, according to a recent ruling by the Wage and Price Commission. The Commission used the hypothetical case of a physician who does not raise his fees the first year. In such a case, the Commission rule that any portion of a doctor's 2.5% allowed fee increase could be carried over to the next year. In this case, then the next year th physician could raise his fees up to 5%.

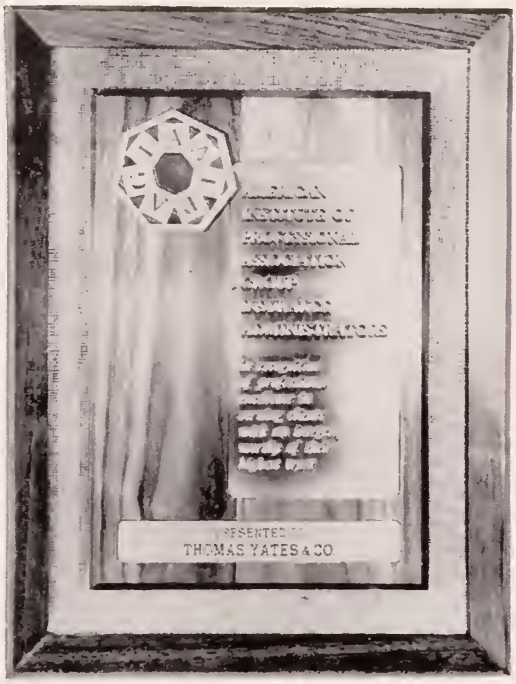
Hospitals-only restrictions on abortions were struck down by New York Court of Appeals last month, reports N.Y. Medical Society news bulletin. In overturning local laws by a 6-to-1 decision, the court ended controls preventing physicians from performing abortions outside of hospitals. The opinion read, "There can be no doubt that th state has reserved to itself regulation of the practice of medicine in general, and of the performance of abortions in particular."

Federal judge ordered D.C. General Hospital in Washington to stop re quiring husband's consent when a married woman applies for abortion or sterilization. He said hospital's policy deprived indigent married women "of their right to receive needed medical care, to contro their own bodies and to choose whether to bear the greater risks of pregnancy and childbirth or the lesser risks of therapeutic abortion Ruling applies to D.C. General only, city's lone public hospital.

System for lining artificial organs and blood vessels with recipient own cells to make devices more acceptable to the body is being devel oped by U. of Michigan scientists. Anatomy professor H. R. Kahn sai cells were removed from patient, grown in laboratory dishes and seed into artificial devices, which have then been implanted into patient Researchers hope to eliminate undesirable biological changes which occur with artificial devices.

A mandatory continuing education program by the Pennsylvania Medical Society started July 1. As of that date, all active and senior acti members of PMS will have three years to qualify for AMA Physician's Recognition Award to retain their membership. The Arizona Medical and Oregon Medical associations also require members to participate in continuing education programs, but PMS is first state medical society to specifically require members to qualify for award.

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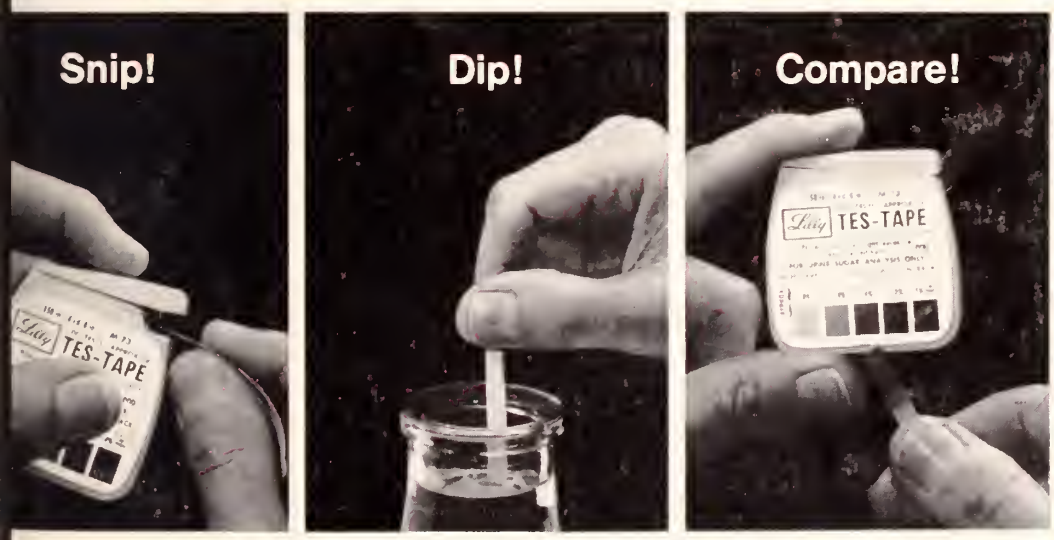
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up to 100 mg daily in severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
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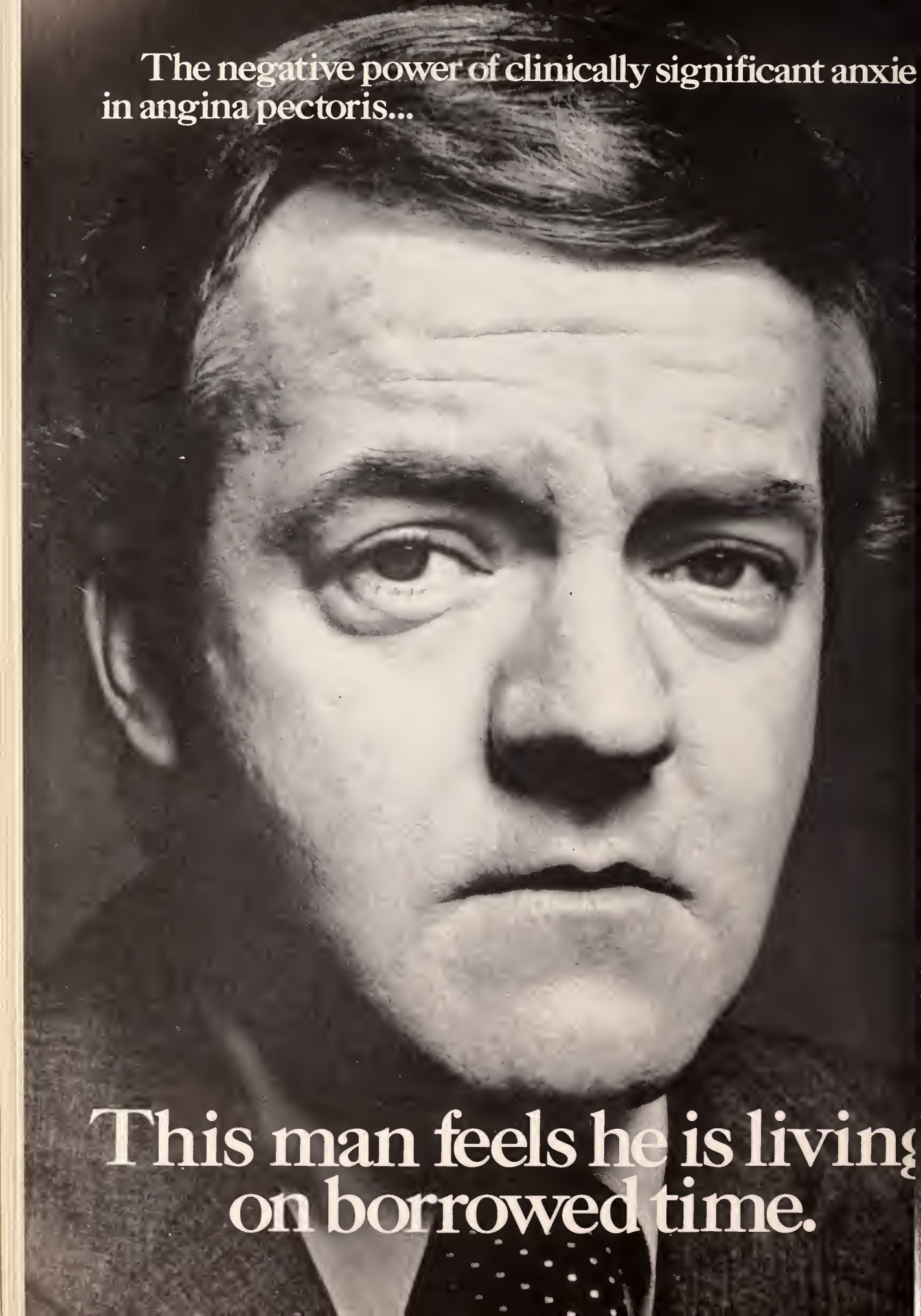
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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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*Levine, S.: "Angina Pectoris and Emotional Overlay," Scientific Exhibit presented at the Annual Meeting of the Maine Medical Association, Kennebunkport, Me., June 13-15, 1971.

A copy of the Levine study may be obtained from your Roche representative.

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References should be limited to a maximum of 10, but when justified to the Editors, additional references will be considered for publication. Each will be critically examined, and only valid, primary references will be published. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus,* volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made after proof sheets are received by the JOURNAL.

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JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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CONTENTS

ORIGINAL PAPERS

Management of Acute Otitis Media in Private Pediatric Practice **385** John D. Coffey, Jr., M.D., Natchez, Mississippi

Hyperparathyroidism Presenting as Nasal Obstruction **388** Benton M. Hilbun, M.D., and Brown Robertson, M.D., Tupelo, Mississippi

Nutrition in the Burned Patient **391** Robert T. Love, Jr., M.D., Greenville, Mississippi

SPECIAL ARTICLE

Radiologic Seminar CXX: Traumatic Rupture of the Diaphragm **394** Phil O. Nelson, M.D., Laurel, Mississippi

EDITORIAL

Slaughter on the Mississippi Highways —Must It Continue? **397** Thomas W. Wesson, M.D., Tupelo, Mississippi

THIS MONTH

The President Speaking **396** 'Mississippi Association of Medical Assistants'

Medical Organization **405** Drs. Martin and Jenkins Announce Format for the 105th Annual Session

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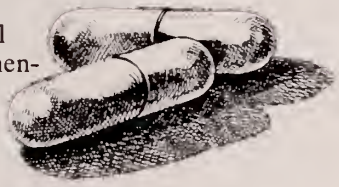
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Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

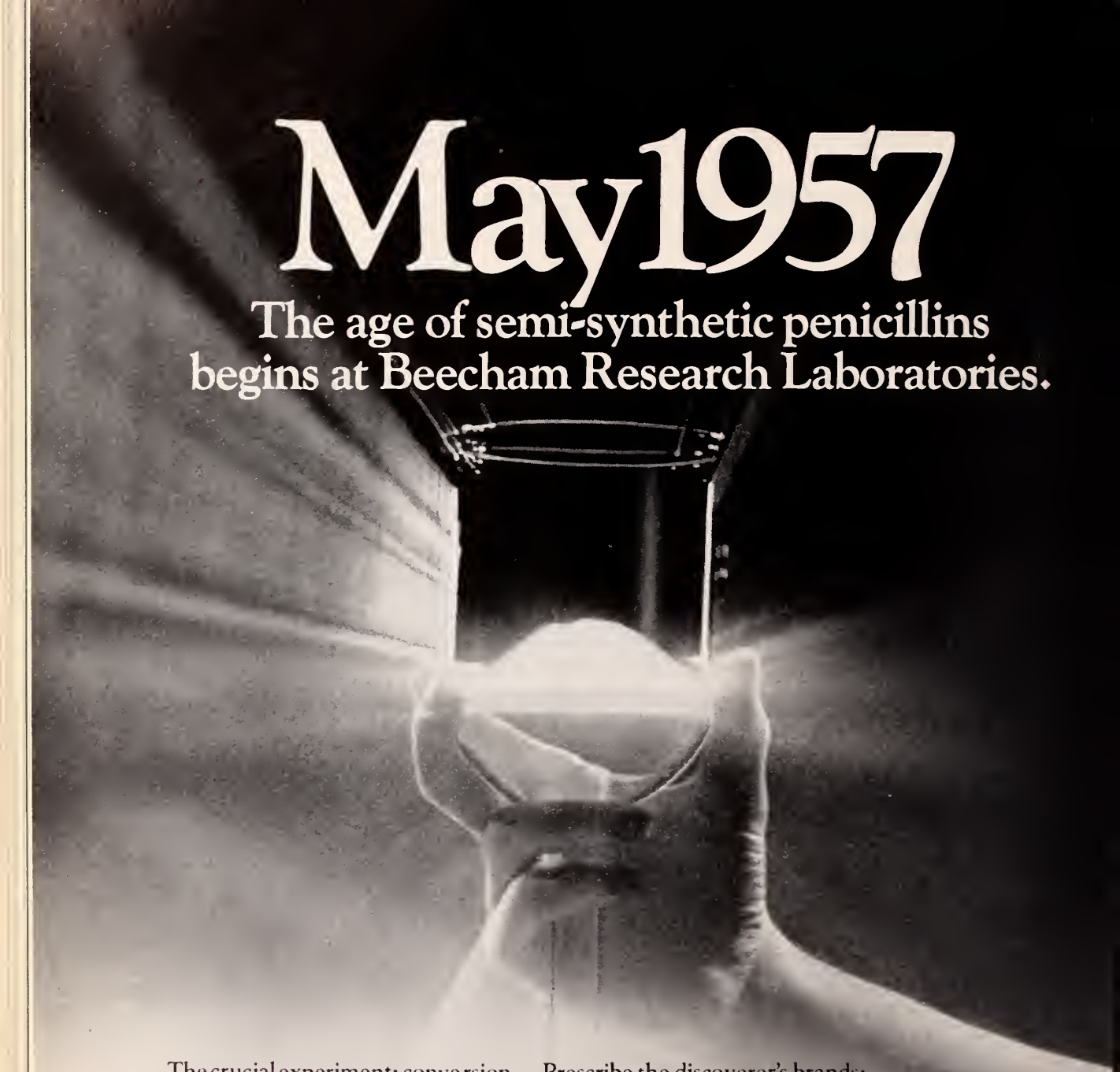
Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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NEWSLETTER

September 1972

r Doctor:

has issued revised interim regulations that substantially reduce amount of charity care that Hill-Burton funded hospitals and other titutions would be required to provide. Last April HEW required lth facilities that received Hill-Burton loans to provide minimum el of free services to the poor that would be no less than 5% of rating costs or 25% of net income. Decree brought strong protests.

Hospitals must now satisfy any of three conditions: (1) Certify they will not deny admission to any one unable to pay; (2) agree to provide uncompensated care equal to 3% of operating costs, excluding Medicare and Medicaid; (3) agree to provide free care at level of 10% of Hill-Burton assistance.

A has received a communication from the HEW regional representative ing that effective immediately, whenever participation of a Medicare-tified hospital, extended care facility, home health agency, indepen- laboratory, or supplier of portable x-rays is involuntarily termi- ed, public notices must state reasons for termination.

test growing medical profession has been nursing, according to sic Facts on the Health Industry" put out by U.S. House Ways and ns Committee. In relation to entire population, ratio of dentists reased slightly, while M.D. ratio increased 7%. However, ratio of ses to population has jumped 33% since 1950 (including 28% part-time).

te Medical Society of Wisconsin will assess its 4,400 members $10 to inform legislators and citizens of chiropractic's threat to lic health. Levy was authorized by recent SMSW House of Delegates. 00 per member assessment was voted by Utah State Medical Associa- to finance campaign against practice of chiropractic.

pulse corporation president Jesse Ross writes, "There are 5000 uni- sities, hospitals, clinics and doctors, as well as Army, Navy and facilities, who have tried Diapulse and then purchased the equipment, r seeing beneficial results...We vehemently protest the disgraceful se of governmental power by the Device Division of the FDA."

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor

DBI® phenformin HCl
Tablets of 25 mg.
DBI-TD® phenformin HCl
Timed-Disintegration
Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.
Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoxemia.
Warnings: Use during pregnancy is to be avoided.
Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended

Why go to the islets

Let's say you've decided that diet alone won't work in your adult-onset, nonketotic diabetic.

You're considering oral therapy for a new patient. DBI-TD or a sulfonylurea. Which?

Both lower blood sugar. But here's why DBI-TD, which is not a sulfonylurea, may be important to the dieting diabetic.

- Sulfonylureas promote release of insulin.
- Insulin is lipogenic and helps transport glucose into adipose tissue.
- Overweight patients frequently have normal or high levels of endogenous insulin.
- DBI-TD lowers blood sugar without stimulating insulin secretion from the pancreas.

Usual dosage: one 50-mg. capsule with breakfast may be effective, or a second capsule may be given with the evening meal.

DBI-TD® Geigy
phenformin HCl

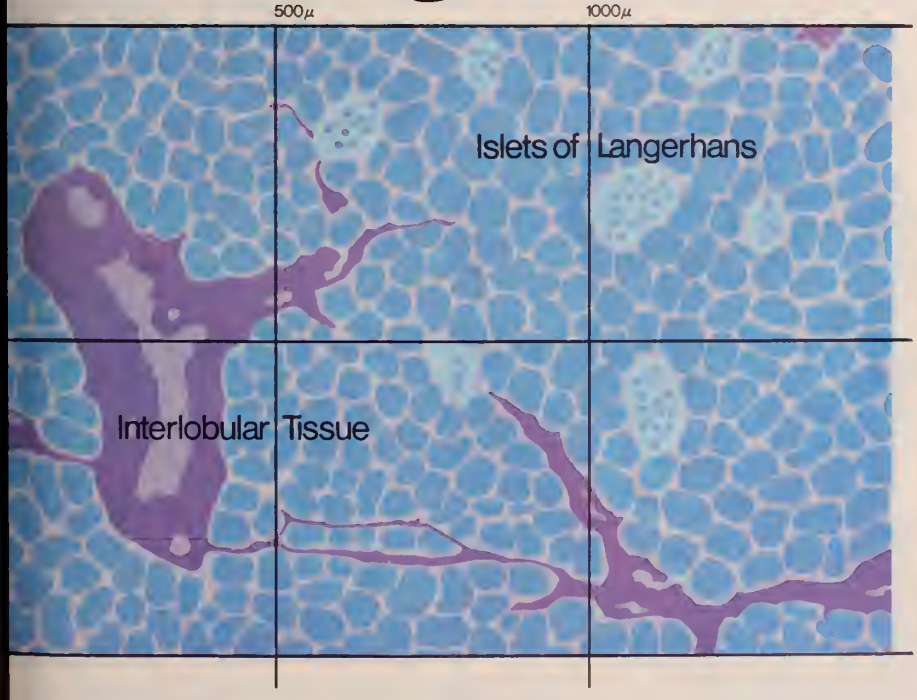
lowers blood sugar
without raising blood insulin

presence of azotemia or in any clinical
ion that predisposes to sustained hypoten-
hat could lead to lactic acidosis. To
entiate lactic acidosis from ketoacidosis,
dic determinations of ketones in the blood
rine should be made in diabetics previously
ized on phenformin, or phenformin and
n, who have become unstable. If electrolyte
lance is suspected, periodic determinations
d also be made of electrolytes, pH, and the
e-pyruvate ratio. The drug should be with-
n and insulin, when required, and other
ctive measures instituted immediately upon
the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.
Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
(B) 98-146-103-D (6/72)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

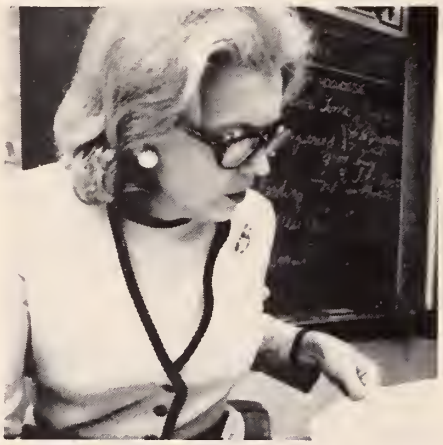
of Langerhans?



Before using DBI-TD or any oral hypoglycemic, please read the prescribing information concerning dosage, warnings, contraindications, precautions and adverse reactions.

Literary Hemorrhoids

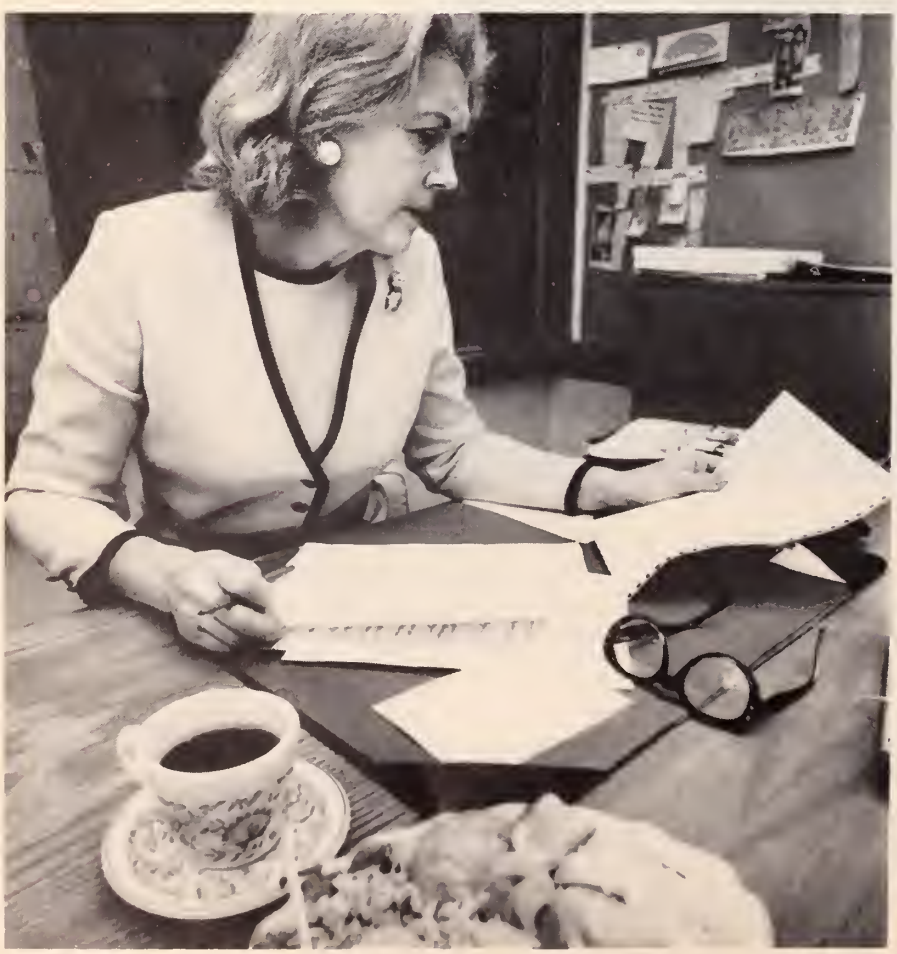
Mrs. S.R., 47, high school English teacher. A history of anorectal pain and burning of several years' duration. On and off weight reducing diets, the insufficient bulk of which has aggravated a chronic constipation problem. Subsequent straining at stool has precipitated an acute episode of internal-external hemorrhoids.



a typical proctological patient

to help relieve the pain, itching, burning associate with this and similar anorectal conditions

prescribe



Anusol HC®

hemorrhoid suppositorie with hydrocortisone acetate

Each suppository contains hydrocortisone acetate 10 mg, bismuth subgallate 2.25% bismuth resorcin compound 1.75%, benzyl benzoate 1.2%, Peruvian balsam 1.8%, zinc oxide 11.0%, and boric acid 5.0%, plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Precaution Prolonged or excessive use o Anusol-HC might produce systemic cortic steroid effects. Symptomatic relief should not delay definitive diagnosis or treatmen

Dosage and Administration Anusol-HC One suppository in the morning and one bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtim and one immediately following each evacuation.

And for long-term patient comfort...recommend Anusol® hemorrhoidal suppositories. Each suppository contains the ingredients of Anusol-HC without the hydrocortisone.

Warner-Chilcott
Division, Warner-Lambert Compar
Morris Plains, New Jersey 07950
ANGP-23 Rev.

Dermatologists Plan 31st Annual Meeting

The 31st annual meeting of the American Academy of Dermatology (AAD) will be held Dec. 2-7, 1972, at the Americana Hotel in Bal Harbour, Fla. The 3,600-member medical specialty society represents dermatologists and dermatological research scientists in the United States and Canada.

The AAD's annual meeting, which is expected to attract some 2,500 registrants, will feature special courses in various aspects of diagnosis and treatment of skin diseases, symposia, seminars-in-depth, special lectures and more than 125 informal discussion groups on selected subjects.

Other features of the six-day session will be scientific and technical exhibits, a banquet and a series of pre-session meetings sponsored by the Academy's National Program for Dermatology.

Two Pulmonary Courses Planned in New Orleans

The ninth annual postgraduate course for physicians on "Pulmonary Function in Health and Disease" will be held in New Orleans, Dec. 4-7, 1972, in the Tulane Medical School auditorium.

Dr. Howard A. Buechner is chairman of the course which is sponsored by the American Thoracic Society, Tulane University School of Medicine, LSU School of Medicine, the Alton Ochsner Medical Foundation, and the Louisiana Thoracic Society.

Tuition is $135 for physicians and Ph.D.'s, $85 for allied health personnel, and $110 for American Thoracic Society members.

The course will include lectures, symposia, demonstrations, panel discussions and case presentation conferences and is limited to 250 registrants.

Course programs, application forms and hotel information are available from the Louisiana Thoracic Society, Suite 1504, 333 St. Charles Ave., New Orleans, La. 70130; attention: W. F. Raymond, course coordinator.

Following the pulmonary function course will be the second annual postgraduate course on "Pediatric Pulmonary Function and Disease," Dec. 7-9.

The 1972 pediatric course will emphasize respiratory allergies in children and their relationship to pulmonary function. Limited to 100 physicians, the course has a tuition of $75. Physicians attending both courses may register for both at a total fee of $160 ($140 for ATS members).



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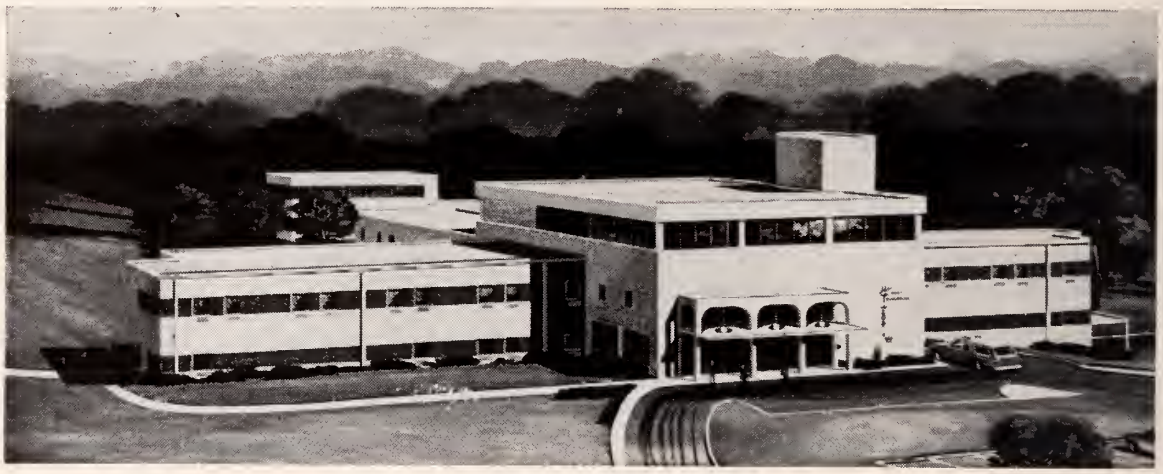
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For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

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James A. Greene, M.D.
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Otto F. Eisenhardt, M.D.

ADMINISTRATOR:

Robert V. Sanders

HILL CREST HOSPITAL

HILL CREST FOUNDATION, INC.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: 205-836-7201

DATELINE

riable Life surance Sold

Little Rock, Ark. - The first reported sale of a variable life insurance policy in this country was made by a subsidiary of Aetna Life & Casualty. licy was purchased from Aetna Variable Annuity Life Insurance Co. Arkansas Neurological Clinic, Ltd., as part of qualified corporate nsion plan for its employees. Cash value and death benefit will vary th investment performance of separate portfolio of equity securities.

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prida Develops epaid Health

Los Angeles, Cal. - Huntington Health Services' Care Maintenance Systems, Inc., has entered into agreement with Interservices, Inc. of Miami to develop epaid health services in Florida. "Under new law," said I.N. Alpern s president, "a qualified HMO may employ doctors and paramedicals, y own and operate general hospitals, medical clinics and other health re facilities, and may provide a variety of other services in Florida."

---

dent Funds rces Listed

Chicago, Ill. - AMA has issued a new publication, a guidebook to grants, which can assist potential doctors and allied health workers to obtain money finance training. More than 1,000 sources of funds are listed in ND (Financial Information National Directory-Health Careers). Book ls where aid sources are, how much is offered, who is eligible and re to apply. Price is $2.95 per copy.

Signs with eral Agencies

Evanston, Ill. - American Academy of Pediatrics signed federal contracts aimed at improving child health care and agreed to: (1) monitor certain no acid products prescribed to treat inborn errors of metabolism; conduct research conference on effects of chemical pollutants on us and child; (3) review and publish reports of Ten State Nutrition vey; (4) review use of children's drugs and prepare FDA guidelines.

---

pital Expenses Costs Slowed

Chicago, Ill. - Statistics released by American Hospital Association show that expenses in nation's community hospitals rose at significantly slower e than in any previous year since 1966. Expenses rose 14.5% during l, compared to 17.7% in 1970. Cost of caring for hospital patient one day increased 13.9%, from $81.01 in 1970 to $92.31 in 1971. roll expenses also rose at markedly slower rate, says AHA.

Southeastern Internists Schedule Meeting

Plans have been completed for the 1972 southeastern regional meeting of the American College of Physicians. The two-day session is for internists and physicians in related medical specialties from Alabama, Georgia, Louisiana, Mississippi and South Carolina. The meeting will be held Sept. 22-23, 1972, at the Broadwater Beach Hotel in Biloxi, Miss.

The 20,000-member American College of Physicians (ACP) is an international medical society with the prime function of providing continuing education to practicing physicians.

The southeastern regional meeting is one of 40 scientific meetings sponsored by the ACP during the 1972-73 academic year. Held throughout the United States and Canada, these one and two-day sessions help physicians keep informed about new knowledge and developments in the basic clinical sciences.

The Biloxi meeting is being planned under the direction of Dr. Guy D. Campbell of Jackson, ACP Governer for the five-state region.

ACP Plans Course on Internal Medicine

The American College of Physicians (ACP) will sponsor a five-day postgraduate course on "Basic Mechanisms in Internal Medicine" Sept. 25-29, 1972, in Richmond, Va. The course will be held at the Medical College of Virginia, Division of Health Sciences.

The postgraduate session is one of 35 to be sponsored by the ACP in the United States and Canada during the 1972-73 academic year. Their purpose is to give specialists in internal medicine and related specialties an opportunity to review basic information and to find out what's new in a particular area of interest.

At the Medical College of Virginia course, physicians will learn about new and significant advances in internal medicine with emphasis on basic mechanism and patho-physiologic concepts as they relate to clinical manifestations and to therapy of disease.

The course is being planned under the direction of Dr. W. T. Thompson, Jr., director, and Dr. W. Robert Irby, co-director, both from Richmond.

For further information, write Dr. E. C. Rosenow, Jr., executive vice president, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms (usually *E. coli*, *Klebsiella Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis* and less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

IMPORTANT NOTE: *In vitro* sulfonamide sensitivity tests are not always reliable. The test must be carefully coordinated with bacteriologic and clinical response. When the patient is already taking sulfonamides, follow-up cultures should have aminobenzoic acid added to the culture media. Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including the sulfonamides, especially in the treatment of chronic and recurrent urinary tract infections.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis), pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* has not been established. Sulfonamides will not eradicate group A streptococci. Deaths associated with sulfonamide administration have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalyses with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some goitrogens, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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Division of Hoffmann-La Roche Inc.
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In *acute, recurrent or chronic* nonobstructed cystitis

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High plasma concentrations
For most urinary tract infections, therapeutic plasma levels (5 to 10 mg per cent) are usually reached in 2 to 3 hours and can be maintained on a dosage of 4 to 8 Gm/day.

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Average daily cost of therapy only about 78¢
(3 tablets *q.i.d.*)

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Thirty years of research in sulfonamide development and technology provide you with a drug which is the standard in its field.

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Usual adult dosage:
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A single-dose, non-staining anthelm

is pinworms...



with just one non-staining dose of Antiminth (pyrantel pamoate) Oral Suspension.

Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion. Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia

Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight (One teaspoonful=5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made

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In Appreciation

The many fine technical exhibitors who participated in the exhibit during the recent Mississippi State Medical Association 104th Annual Session are deserving of our recognition and a hearty "Thank You!" Not only did the presence of these exhibits enhance the educational quality of our meeting, but the support provided by our exhibitors is essential to the continuance of our traditionally outstanding scientific program.

The firms listed below participated in our 1972 annual meeting exhibit and we voice a collective expression of our sincere appreciation. May we also suggest that you retain this listing and express your personal appreciation when their representatives call upon you.

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Scientific Grants Were Received From

Geigy Pharmaceutical, Ardsley, N. Y.
Eli Lilly and Company, Indianapolis, Ind.
Pfizer Laboratories, Chamblee, Ga.
A. H. Robins Company, Richmond, Va.

American O & O Academy Schedules Meeting

The annual meeting of the American Academy of Ophthalmology and Otolaryngology will be held in Dallas Sept. 24-28.

A key feature of the meeting will be a discussion of the problems of vision and balance in outer space, based on experience to date with Apollo space missions. Another will be a mock malpractice trial.

For further information write Theodore Berland, 2729 W. Lunt Avenue, Chicago, Ill. 60645.

AAP Studies Practice Efficiency

The American Academy of Pediatrics, in a move to improve delivery of health care to children, has signed a contract with Health Learning Systems of West Orange, N. J., to develop an audio cassette educational program on pediatric practice efficiency.

Health Learning Systems is developing 12 audio cassette tapes complete with printed materials to assist the physician in actual implementation of office design techniques, patient flow, aide utilization, and medical record keeping among others. Health Learning Systems is also developing the actual systems and equipment which can be utilized in the physician's practice.

The audio tape series will be developed in two parts, each part containing six individual segments.

Series one will include information on the structure of pediatric office practice, patient flow-scheduling, patient intake, parent education, aide utilization (history taking, interview technique and patient rapport), and aide utilization (functions and philosophy).

Series two will include information on the use of the nurse assistant, medical records, patient outtake, general office administration, financial control, and billing.

Each series will be available complete with a learning text which will enable the individual physician to analyze his specific practice problems. The program can be reviewed by both the physician and his assistants in the office, hospital or at home, and includes actual systems which can be incorporated into practice.

The program will be developed under the supervision of an Academy advisory panel consisting of six AAP Fellows.

"The history of science, and in particular the history of medicine... is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

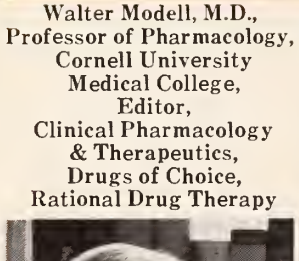
Opinion & Dialogue

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really determined.

The Bureau of Drugs h suggested the package sert as a possible means communicating informat on relative efficacy of dru to the physician. I find t objectionable, since I not believe the physici should have to rely on t source for final scienti truth. There is also a pr tical objection: Since f physicians actually d pense drugs, they seldo see the package insert. any event, I would ma tain that the physici should know what drug wants and why without pending on the governme or the manufacturer to t him.

Undoubtedly, physicia are swamped by excessi numbers of drugs in so therapeutic categories. A I am well aware that ma drugs within such ca gories could be eliminat without any loss, or p haps even some profit, the practice of medici But, in my opinion, neith the FDA nor any oth single group has the exp tise and the wisdom nec sary to determine the o "drug of choice" in areas of medical practice

Maker of Medicine

nneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
li Lilly and Company



n my opinion, it is not function of any governnt or private regulatory ncy to designate a "drug hoice." This determina- should be made by the sician after he has reed full information on properties of a drug, then it will be based on experience with this and his knowledge of individual patient who eeking treatment.

an evaluation of comtive efficacy were to be le, particularly by govnent, at the time a new is being approved for keting, it would be a t disservice to medi- and thus to the patient e consumer. For exam- when a new therapeugent is introduced, on basis of limited knowl-, it may be considered e more potent, more ctive, or safer than ducts already on the ket. Conceivably, at time the new drug d be labeled "the drug choice." But as addial clinical experience is mulated, new evidence become available. r, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

What is your opinion, doctor?
Send us your comments on the above issue.

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
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ORIGINAL PAPERS

Management of Acute Otitis Media in Private Pediatric Practice

JOHN D. COFFEY, JR., M.D.
Natchez, Mississippi

An aggressive approach to the management of otitis media is advocated by the author. This includes diagnostic and therapeutic tympanic paracentesis, culture, adequate antimicrobial therapy, and the insertion of plastic tympanostomy tubes in recurrent or persistent cases of middle ear effusions. He points out that lesions which impede enstachian tube ventilation should not be overlooked.

ACUTE EXUDATIVE OTITIS MEDIA is one of the most frequent problems encountered in the private practice of pediatrics and requires careful examination of the tympanic membrane, often after clearing debris from the ear canal with curet, suction tip, or pulsating stream of water (from a dental "water pick"), in all patients presenting at the clinic, regardless of their complaint. It has been documented by the author[1] that only 25 per cent of patients found to have otitis media were brought to the pediatric clinic with complaints directly referable to the ears. The highest incidence is found in the infant age group; those unable to localize their symptoms.

The concurrence of exudative otitis media with more serious infections such as meningitis, pneumonia, and acute laryngotracheobronchitis was emphasized by Van Wormer,[2] who reviewed autopsy material from 29 infants who died unexpectedly. The same organism cultured from the meninges or lungs was also found in the tympanic cavity. The author has, in private practice, seen one pneumococcal and three Hemophilus influenzae meningitis cases in which the same organism was recovered from both the cerebrospinal fluid and the middle ear exudate. Organisms are often more readily identifiable in smears of exudate obtained by tympanic paracentesis than of cerebrospinal fluid. This serves to emphasize the importance of adequate middle ear examination in all patients and the value of diagnostic tympanic paracentesis when indicated.

In the author's hands and those of others,[3] tympanic paracentesis, using the Senturia Ear Specimen Collector with attached needle, has served as a valuable tool in the etiological diagnosis, therapy, and evaluation of the efficacy of antimicrobial treatment of middle ear infections. In 965 cases reported by the author,[1, 4] pneumococci and Hemophilus influenzae were found in about equal numbers in the majority of cases. Streptococcus hemolyticus (Group A) accounted for about 1 per cent and Neisseria catarrhalis about 7 per cent. This has been confirmed by Kamme.[5] It is felt that paracentesis is of therapeutic value in providing early relief of pain and in releasing confined pus under pressure. In most cases the paracentesis wound heals over in

From the Department of Pediatrics, Natchez Medical Clinic, Natchez, Miss.

two or three days, often leaving fluid retained in the tympanic cavity. If the efficacy of antibiotic therapy needs to be assessed, repeat paracentesis can be performed and the material cultured, thus providing an *in vivo* antibiotic sensitivity test as described by Howie et al.[6]

The most satisfactory topical anesthetic for tympanic paracentesis has been found by the author and many of his colleagues to be the application of a tiny swab of concentrated liquid phenol to the precise spot for the paracentesis, as described by Storrs.[7] After blanching is obtained, the spot is swabbed with ethanol 70 per cent and the tap is done. Adequate immobilization of infants and small children is essential.

APPROPRIATE TREATMENT

If identifiable organisms are found on direct smear, appropriate antibiotic treatment is started; if typical pneumococci are seen, procaine penicillin intramuscular is given; if organisms resembling Hemophilus influenzae are seen, ampicillin or one of its derivatives is usually given by injection, followed by oral doses. Continuing treatment is determined by the results of culture, therapeutic doses being maintained for at least 10 days. If no organisms are identified by smear and culture, the clinical state of the patient, as well as results of cultures from other sites such as the nasopharynx, helps to determine the appropriate therapy. Children who are febrile and acutely ill often have other complications which should be sought, and more intensive parenteral antibiotic therapy instituted. Ampicillin 150 mg/kg/day should be administered if no organisms are identified or if Hemophilus influenzae is found; parenteral penicillin in large doses should be given for 10 days if pneumococci or streptococci are found in association with clinically severe infection. Neisseria catarrhalis infections are usually (but not necessarily) benign and respond well to most of the penicillins and other oral antibiotics such as erythromycin; many will respond to paracentesis and/or *Vis Medicatrix Naturae* (i.e., the healing power of nature).

It has been suggested by Howie and Ploussard[8] that a delay in antibiotic treatment may lead to enhancement of the development of an immune response to infection.

Studies by Howie and Ploussard[6] and by Halstead et al[9] attest to the efficacy of combined penicillin and sulfonamide treatment. In recent months, the author has been using a combination of daily injections of procaine penicillin 600,000 U., along with trisulfapyrimidines in total daily dosage of approximately one grain per pound of body weight (150 mg/kg) given in four divided doses, continued for 8 to 10 days. The clinical impression has been that the results are as good as, if not better than, with the use of penicillin alone, or with ampicillin alone for pneumococcal or Hemophilus influenzae infections, respectively.

It is also the clinical impression of the author that persistent sero-mucous middle ear effusions and relapses with the same organism are less frequent than with the use of penicillin or ampicillin alone. A controlled study would be necessary to verify this postulate. Kamme, et al,[5] in a study of 75 children with acute exudative otitis media, demonstrated two cases of pneumococci which were isolated only on media designed for the isolation of L forms. They suggest that reversion to ordinary bacterial forms may occur with clinical relapse resulting. Since sulfonamides act as bacterial antimetabolites, preventing the utilization of PABA by bacteria and thus being effective against L or protoplast forms, it may be that they can reduce the incidence of relapse by eliminating the persistent L forms which can be left after antibiotics such as penicillin have attacked their cell walls. An attempt to culture L forms from persistent seromucous and recurrent exudative otitis media is proposed by the author.

ADEQUATE FOLLOW-UP

All cases of otitis media should have adequate follow-up until healing is established and pneumatic otoscopy shows the middle ear to be air-containing. Cases of persistent chronic exudative (serous, mucous, or "glue") otitis media require more complex study and therapy. Screening for an allergic diathesis and for nasopharyngeal lymphoid hyperplasia is indicated, and, if found, dealt with by appropriate antiallergic measures, or by adenoidectomy. Oral decongestants and repeated inflations using the politzer technic will often re-establish normal tubotympanic ventilatory function.

Failing this, a paracentesis is done with a large (16 or 17 gauge) needle attached to a Senturia Ear Specimen Collector, the middle ear fluid aspirated, and a split teflon (Feuerstein)[10] tube inserted. With this in place, solutions containing hydrocortisone and antibiotics can be gently insufflated into the tympanic cavity and out of the eustachian tube into the nasopharynx using a pneumatic otoscope; air can also be insufflated in a "retrograde politzer" fashion to establish patency of the eustachian tube. The author leaves tympanostomy tubes in place for about six months, but maintains them for extended periods in cases with anatomically impaired tubotympanic

function such as children with cleft palates or Turner's syndrome.

Recurrent acute exudative otitis media can and does occur in children with tympanostomy tubes *in situ*. This can originate in the nasopharynx via the eustachian tube, in which case the organisms cultured are usually pneumococci or Hemophilus influenzae; or from the external ear canal after getting water, milk, vomitus, or other foreign fluids in the ear canal. The infections from the respiratory tract respond well to antibiotic therapy as described above. The infectious agents from the external environment, usually Pseudomonas aerugenosa or staphylococci, respond well to simple aspiration of the tympanostomy tube with a small suction tip, then insufflation of solutions containing colistin or polymyxin with hydrocortisone.

Recently the author has been inserting small Feuerstein tubes in some cases of mild or moderately severe acute otitis media when it is recurrent or when it is apparent that the acute episode is superimposed on an old mucous (glue) otitis media in which the aspirate contains fresh pus mixed with old ropy mucoid secretion or exudate. The results have been gratifying. ★★★

49 Sargeant S. Prentiss Drive (39120)

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UNEASY RIDER

The hippie cyclist had ventured high into the hills, finally running out of road. A hillbilly type, seeing his first motorbike, let fly at it with his rifle.

"Did you hit that strange-looking varmint?" asked his pal.

"Think I just creased it," he said. "I can still hear it a'growling away up there, but I shore made him turn a'loose that poor woman he was carrying off."

Hyperparathyroidism Presenting as Nasal Obstruction

BENTON M. HILBUN, M.D., and
BROWN ROBERTSON, M.D.
Tupelo, Mississippi

An unusual manifestation of hyperparathyroidism is presented and discussed. Giant cell tumor producing nasal obstruction has not heretofore been reported in the literature. The case presented demonstrates multiple bony lesions as a result of a parathyroid adenoma which was surgically removed. The pathophysiology is reviewed and attention directed toward early diagnosis and management of hyperparathyroidism.

SKELETAL MANIFESTATIONS of hyperparathyroidism are relatively rare in contrast to the renal complications which occur. Bony lesions which occur as a result of over production of parathormone usually appear later in the course of the disease and are seen in only 10 to 20 per cent of the cases. The bone changes that we are familiar with include the changes in the phalanges, generalized osteoporosis, loss of the lamina dura of the teeth, and osteitis fibrosa cystica. In addition to these one may find the giant cell tumors of various bones. It is the unusual location of the "brown" or giant cell tumor that prompted our report.

CASE REPORT

R. G. is a 74-year-old Caucasian female who entered the hospital in July of 1970 with a pathological fracture of her left humerus which on x-ray revealed a cystic tumor in the proximal humerus (see Figure 1). The serum calcium was 12 mg per cent. A resection of the proximal humerus was carried out with a pathological diagnosis of giant cell tumor being made. X-rays of the long bones and spine revealed only osteoporosis. She made an uneventful recovery and was discharged.

The patient was readmitted to the hospital one month later with anemia, and repeat skeletal x-rays revealed a cystic lesion in the left ilium (see Figure 2). Serum calcium was 13 mg per cent and the alkaline phosphatase was elevated to 155 units. The other studies were not remarkable. The hematocrit was 28 per cent and the smear was consistent with iron deficiency anemia. Consideration at this time was given to a diagnosis of hyperparathyroidism, and neck exploration was advised. The patient, however, declined the surgery.

This patient was not seen again until December of 1971 at which time she presented with a complaint of nasal obstruction. Nasal examination revealed an obstructing tumor in the posterior nasal passage. The lesion was biopsied and a report of giant cell tumor was given. The tumor was considered to be consistent with hyperparathyroidism and was similar to the previous lesion of the humerus (see Figure 3). Further x-rays revealed a lesion in the skull projecting into the frontal sinus (see Figure 4) and some enlargement of the cystic tumor in the ilium. Serum chemistries revealed a calcium of 12.5 mg per cent with a phosphorus of 3.5 mg per cent. The alkaline phosphatase remained elevated at 255 units.

The patient consented to surgery and a large 3 cm by 2 cm parathyroid adenoma was removed from the left inferior neck. The serum calcium

From the Department of Surgery, North Mississippi Medical Center, Tupelo, Miss.

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Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	240 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin	7.5 mcg.
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Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	0.5 mg.

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B_{12} progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

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phenobarbital (warning: may be habit forming)	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.

Brief summary. Side effects: Blurring of vision, dryness of the mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or prostatic hypertrophy. Contraindicated in [illegible] as in prostatic hypertrophy. Contraindicated in obstructive disease of the gastrointestinal tract, glaucoma, advanced renal or cardiac disease, and in sensitivity to any of the ingredients.

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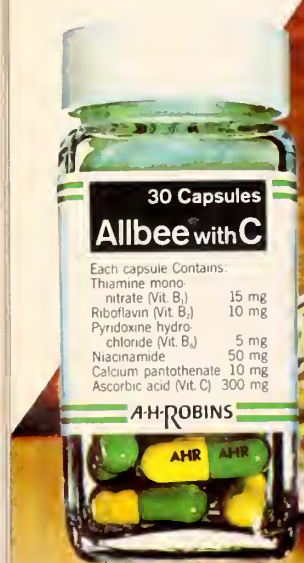
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promptly fell to 8.8 mg per cent. The patient was seen three weeks postoperatively, and there was apparent decrease in size of the nasal lesion.

DISCUSSION

In reviewing the literature for publications dealing in the skeletal manifestations of hyperparathyroidism, one finds only a limited number of such reports. Most of the publications have been in the dental literature dealing with lesions of the mandible and maxilla.

The incidence of "brown" tumors seems to vary widely with the series presented. In Hellstrom and Ivenmark's[1] series of 138 cases of hyperparathyroidism, there were 13 patients with giant cell or "brown" tumors. However, Black and Zimmer[2] reported only 1 case in 207 cases of hyperparathyroidism.



Figure 1

There are several case reports of giant cell tumors as the presenting manifestation of hyperparathyroidism. Raskin, Rowe, and Field[3] report a tumor of the middle cranial fossa; Rotblat and Laskin[4] report a case of tumor of the mandible; and Whitlock[5] reports several cases of tumors of the mandible as well as the maxilla. We discovered no reports of cases that presented a giant cell tumor of the nasal bone.

The microscopic appearance of the giant cell tumor is one of osteoclastic activity with localized



Figure 2

absorption of bone. Hemorrhage into the lesion gives it a brownish color and hence the descriptive term "brown" tumor. These lesions may present as one isolated tumor or as generalized osteitis cystica. The subject of this report had four areas involved: the humerus, skull, nasal bone, and ilium.

The parathyroid glands are responsible for maintaining the concentration of ironized calcium in the extra cellular fluid. This is accomplished by production of parathormone. Over production may result from adenoma, hyperplasia or carcinoma of any number of the four glands. Approximately 80 per cent of over production is due to parathyroid adenoma, 16 per cent to hyperplasia and the remaining 4 per cent to carcinoma. The resulting hypercalcemia may lead to nephrolithiasis, nephrocalcinosis, or the aforementioned skeletal lesions. It should be mentioned that systemic symptoms including anorexia, weakness, fatigue, dysphagia, and constipation may occur.

The classic signs of hyperparathyroidism are lowered serum phosphorus, elevated serum calcium and increased urinary calicum. The detection of lowered tubular reabsorption of phosphorus may help to diagnose the early case. It appears that the overall incidence of decreased phosphorus is low and may be influenced by the amount of phosphorus contained in the diet.

Hypercalcemia may be caused by a number of other conditions, the most frequent of which is the presence of a malignancy. Lymphoma, carcinoma of the breast, leukemia, bronchogenic carcinoma, and multiple myeloma may all cause elevations of serum calcium. Benign conditions such as sarcoidosis, Paget's disease or milk-alkali syndrome may also produce hypercalcemia.

The diagnosis of hyperparathyroidism is usually made by surgical exploration of the neck and on occasion (about 15 per cent) exploration of the mediastinum. Numerous attempts at preoperative diagnosis or identification of a parathyroid tumor have been made. Selective arteriography of the thyro-cervical artery has yielded limited information. The use of radioisotopic scanning with selenomethionine (Sc 75) has been tried but with little reward.



Figure 3

Studies of the esophagus or larynx with contrast medium have been of no benefit. Even the time-honored physical examination of the neck will in most cases provide no definitive information. Most of the parathyroid tumors occur in the inferior glands and are difficult to palpate even in the thin, elongated neck. The level of hypercalcemia is related directly to the size of the tumor. Serum calcium levels persistently over 11.5 mg per cent will more often than not reveal tumors of significant size.



Figure 4

The case presented emphasizes the importance of considering a diagnosis of hyperparathyroidism when one encounters a giant cell tumor of the long bones, pelvis, cranium or an obstructing tumor of the nasal passage. Regression of the tumor may be expected following removal of the parathyroid abnormality. The single most important diagnostic aid remains the measurement of the serum calcium level. A high index of suspicion must be maintained when dealing with patients who exhibit any of these findings. ★★★

607 Garfield Street (38801)

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Nutrition in the Burned Patient

ROBERT T. LOVE, JR., M.D.
Greenville, Mississippi

PROBABLY MANY BURNED PATIENTS die because they more or less run out of gas. What this means is simply that although we now can resuscitate a patient from a fluid standpoint in the early stages of the burn and more or less control his infection, over a long period of time in a severely burned patient his nutritional state becomes such that he cannot maintain any semblance of positive nitrogen balance, and he simply dies from lack of nutrition.

For a long time, nutrition has been the main factor that has been neglected in severely burned patients. It is felt by many people that the next great step forward in the treatment of burns will be in the conservation of energy losses and better metabolism. Through the work of many investigators, we have all become aware of the fact that the most catastrophic metabolic state does occur in burned patients. In the usual type of trauma, either accidental or surgically induced, protein loss will amount to approximately 90 to 100 gm per day; however, protein losses in burned patients are as high as 200 to 300 gm a day.

Recently, we have come to realize the components of this catabolic catastrophe a little better through more intensive study of burned patients and specifically through the use of burn units. The first category in this catabolic catastrophe would have to be the response to the initial injury which we really know very little about. Superimposed on this is starvation, with three to four days of inadequate intake, immobilization, and then the multiple surgical procedures which are necessary to cover the wound.

The second category would have to be a group of catabolic catastrophes which are peculiar only to the burned patient. Initially, large amounts of protein are lost through the burn wound. This continues to an extent throughout the course of the burn until the patient is completely covered with skin. Fever, inflammation and infection may be present, and along with insensible water loss, cause loss of energy. Radiant heat losses are also very severe because of the injured skin.

The author gives the background of the catabolic catastrophe which occurs in the burned patient and points out that because of inadequate nitrogen balance, many burned patients die from lack of nutrition. He gives the mode of treatment used in the burn unit of the Washington County General Hospital and emphasizes the importance of close cooperation between physician and dietitian in in the treatment of burn patients.

To stop all of this energy loss, there are at least two things of major significance which can be done before we get to the nutrition problem of the patient. First, we rapidly resuscitate all patients now. This can usually be done in most patients within the first 24 hours. After they are resuscitated, they can be allowed to walk. We commonly have all our patients walk to the hydrotherapy room to receive their daily baths. Secondly, with more improved topical antimicrobial agents, we can control infection. With these two major advances over the past 20 years, we are now confronted with the problem of nutrition in a patient who for the most part is in chronic negative nitrogen balance

As most everyone knows, to correct this state of chronic negative nitrogen balance, an increased intake of proteins, calories, vitamins and minerals is required in burned patients. If this increased intake is achieved, weight loss, delayed wound healing and other characteristics of the burn can be minimized.

Presented before the Mississippi Dietetic Association, Greenville, April 20, 1972.
From the Department of Surgery and the Burn Unit, Washington County General Hospital, Greenville, Miss.

As for the specific type of diet which we give our burned patients, we believe that each patient should be treated individually, and the role of the dietitian cannot be overemphasized. Pain, shock and fear of disfigurement or impairment may often destroy not only the badly burned patient's interest in food but even his interest in living as well. The dietitian will have to use all the patience, tolerance and understanding she possesses to encourage this patient to eat. In such cases, it is not unusual to have food become a convenient scapegoat under which the patient may vent his hostilities, and constant attention and consideration must be given to attractive service and food preferences.

In not knowing exactly how much nitrogen to administer to a patient per day, we would have to say that probably 30 to 40 calories per gm of nitrogen is the optimum amount to be administered. Our approach to the patient who is able to eat after the second or third day is generally to feed the patient a regular diet three times a day since we feel that this provides him with a wider variety in nutrition. A regular diet is probably more varied than any other diet in the hospital and consequently would be less monotonous and more palatable to the patient. In addition to this, we like to give between-meal feedings of high protein supplements. There are several commercially available high protein supplements on the market. The one which we are using at present is Vivonex. Although this preparation is slightly low in protein content, it is high in caloric content. The main advantage of this particular supplement is that the protein is supplied as L-amino acids and is completely absorbed. Since the stool is one major source of infection in the burn, we feel that if we can reduce the stool bulk as much as possible, we limit the source from which these patients become infected.

VITAMIN SUPPLEMENT

Also, we feel that we need to supplement the regular diet with vitamins. Any number of commercial preparations are available. We use Iberet-Folic preparation, which contains a large amount of Vitamin C. In a burned patient, vitamins are either lost in the burn wound or utilized. We feel that because of this we need to supplement the patient and particularly we need to supplement his Vitamin C. We sometimes give as much as 2 gm of Vitamin C per day. Also, burned patients lose quite a bit of sodium; potassium losses are also significant. We give sodium chloride tablets to the patients who chronically have low serum sodium, and we also supply potassium in an oral form. Several commercial preparations are available; however, we usually prefer orange juice. This, of course, is more acceptable, especially to the children. Magnesium deficiency in burns has been emphasized and this is given in the form of intramuscular magnesium sulphate. Also, as of late, several reports have appeared that zinc is of importance in burn patients and although we have not used zinc, we plan soon to start giving oral zinc sulphate.

Up to this point we have been discussing nutrition in people who we think can start taking a regular diet no later than the second or third day.

TUBE FEEDING

What do we do with the patient who will not eat? The first thing we usually do is to try tube feeding. Tube feedings have some inherent problems such as diarrhea and regurgitation, with possible aspiration pneumonitis. We have resorted to this on several occasions and the type of diet which we use is practically the same as we use in a patient who is eating. Essentially he gets a regular diet in a puree form. We also supply the vitamins and the Vivonex, all of this being given through the naso-gastric tube.

Last, but not least, it should be mentioned that there are certain patients who develop an ileus and cannot take food by mouth or through a naso-gastric tube. Recently, hyperalimentation has been introduced and we feel that this is a useful adjunct in the treatment of burn patients. We have used it in several instances and have been very well pleased. There are complications associated with this technique and as long as these are appreciated, we feel that it can be used quite safely.

SUMMARY

In summarizing, it can be said that the dietary and nutritional implications for patients with burn injuries involve far more than a written diet order, and the dietitian must be directly concerned with these patients from the time of their admission. The nutritional and feeding problems will depend on the severity and the extent of the injury, the part of the body affected and the mental and emotional attitude of the patient. The role of the dietitian in this part of the patient's treatment cannot be overemphasized. Close communication and cooperation between medical and dietary staffs are essential if the needs of the burned patient are to be met effectively. Planned patient conferences between the dietitian and the nursing staff can do much for good nursing care.

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Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

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Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness insomnia, headache, loss of the sense of taste, nausea, vomiting constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15 mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 26-29, 1972, Cincinnati. Annual Convention, June 24-28, 1973, New York City. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi Academy of General Practice, Annual Meeting, July 26-28, 1973, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Mississippi State Medical Association, 105th Annual Session, April 30-May 3, 1973, Biloxi. H. Cody Harrell, Acting Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie Street, Hattiesburg, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

Radiologic Seminar CXX: Traumatic Rupture of the Diaphragm

PHIL O. NELSON, M.D.
Laurel, Mississippi

WITH TODAY'S HIGH incidence of blunt abdominal trauma, we should keep in mind the fact that the diaphragm is liable to tear and rupture when the abdomen is subjected to a sudden increase in pressure. The acute laceration is often masked by a more overt trauma, and the injury may not become apparent until obstructive symptoms develop. Approximately 95 per cent of tears involve the left leaf of the diaphragm; a tear in both leaves is rare and is usually fatal.

Rupture of the diaphragm rarely occurs alone but almost always is in association with injury to adjacent viscera. About 50 per cent will have the spleen injured, and the other accompanying injuries include lacerations of the liver or kidney and fractures of ribs and pelvis.

Significant Roentgen signs include the presence of a gas-filled viscus demonstrated above the normal level of the diaphragm. The differential diagnosis here can frequently be difficult and consideration has to be given to such possibilities as (1) infrapulmonary effusion, (2) eventration, (3) empyema, (4) lung abscess with air fluid level, (5) phrenic crush with elevated diaphragm, and (6) old diaphragmatic hernia. Fluoroscopy of the diaphragm is often helpful in distinguishing the above. Discoid atelectasis may appear above the elevated diaphragm or herniated viscera and fluid can be present from an accompaniment of strangulation or herniated bowel.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Jones County Community Hospital, Laurel, Miss.

Of course, rib fractures that frequently accompany severe injury may be the cause of the fluid accumulation. Ill advised thoracentesis may lead to tragic consequences, and a lateral decubitus film may be of help when this procedure is contemplated. The mediastinum usually will shift to the opposite side but not necessarily so as seen in an illustrative case.



Figure 1. Initial chest film shows air filled viscus above normal level of diaphragm.

Probably the most helpful examination is barium by mouth and/or by enema. This usually will make the diagnosis but may produce con-



Figure 2. The stomach and colon demonstrated outlined with barium and both of these structures are above the level of the diaphragm.

flicting results. If the stomach is herniated into the chest, the degree of obstruction of the hernia ring will govern the entrance and egress of the ingested barium. The contrast may fail to enter the stomach if the obstruction is complete and similarly, barium administered by enema may demonstrate both loops of a herniated segment of bowel, may enter the herniated proximal loop and fail to descend back into the abdomen, or fail to enter the herniated portion of bowel.

When the diagnosis of a torn diaphragm is made, surgical repair is indicated immediately.

CASE REPORT

C. B., a 34-year-old male, was admitted to Jones County Community Hospital after having been injured in an automobile accident. He had severe dyspnea which was attributed clinically to multiple rib fractures. See Figures 1 and 2.

At surgery, a large tear was present at the dome of the left diaphragm with stomach, omentum, and colon through the hiatus. ★★★

Jefferson Street at 13th Avenue (39440)

The New York Times is on file in the Lenin Library in Moscow. However, would-be readers must first get permission from officials. To insure that the main stream of library traffic is not led into temptation, *The Times* is kept hidden away—in the pornography section.



The President Speaking

'Mississippi Association of Medical Assistants'

CHARLES R. JENKINS, M.D.
Laurel, Mississippi

THIS MONTH'S "President's Page" will be devoted to a group of energetic, loyal, dedicated people who are the backbone of every private physician's practice. I am referring to your own office and clinic assistants, i.e., nurses, laboratory and x-ray technicians, bookkeepers, insurance clerks, receptionists, secretaries, etc. These are the real "physician's assistants," though less publicized than the clinical and scientific assistants encountered in the hospitals.

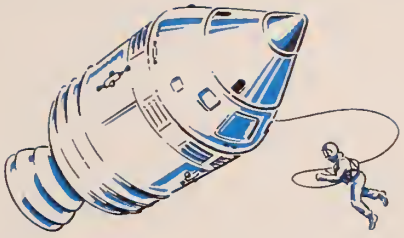
I wonder if all Mississippi doctors know that there is a Mississippi Association of Medical Assistants, a component society of the American Association of Medical Assistants. The national organization was born in Kansas City in 1956 when medical assistants from 14 states met to form an organization dedicated to educate themselves so that they could better serve their doctor-employers. The American Medical Association gave its approval in the same year and since then chapters have been formed in 47 states. The Mississippi chapter was formed in 1965 after the Mississippi State Medical Association had given approval. Since then the growth has been steady and at present there are 8 chapters with 235 members. The president of the Mississippi chapter is Mrs. Thelma Van Cloostere of Long Beach, a most able and energetic person. The state advisors are Dr. R. G. Burman of Gulfport, Dr. Guy Campbell of Jackson, Dr. William T. Oakes of Amory, Dr. James Spell of Jackson, and Dr. John Wofford of Greenwood.

The objectives of this fine organization are noteworthy and commendable. They are: "To inspire its members to render honest, loyal, and more efficient service to the profession and to the public which they serve. To strive at all times to cooperate with the medical profession in improving public relations. To provide educational services to increase the knowledge and professionalism of its members and to stimulate a feeling of fellowship and cooperation among its societies. To encourage and assist all unorganized medical assistants in forming local chapters."

A point of great interest to doctors is that their constitution states that it will never become a trade union or collective bargaining agency.

The American Association of Medical Assistants, recognizing that the well trained assistant can release the physician from many of the non-medical pressures in his practice, is striving with its state and county branches to provide better service to the medical profession and to promote educational material and instruction courses to improve the performance of its members. The AAMA has established a certifying board set up along the same lines as medical specialty boards. Candidates are given two-day written tests on various subjects ranging from medical terminology, anatomy and physiology, to medical ethics, etiquette, office skills, et

(Turn to page 398)



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Manufacturers of Ethical Pharmaceuticals



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

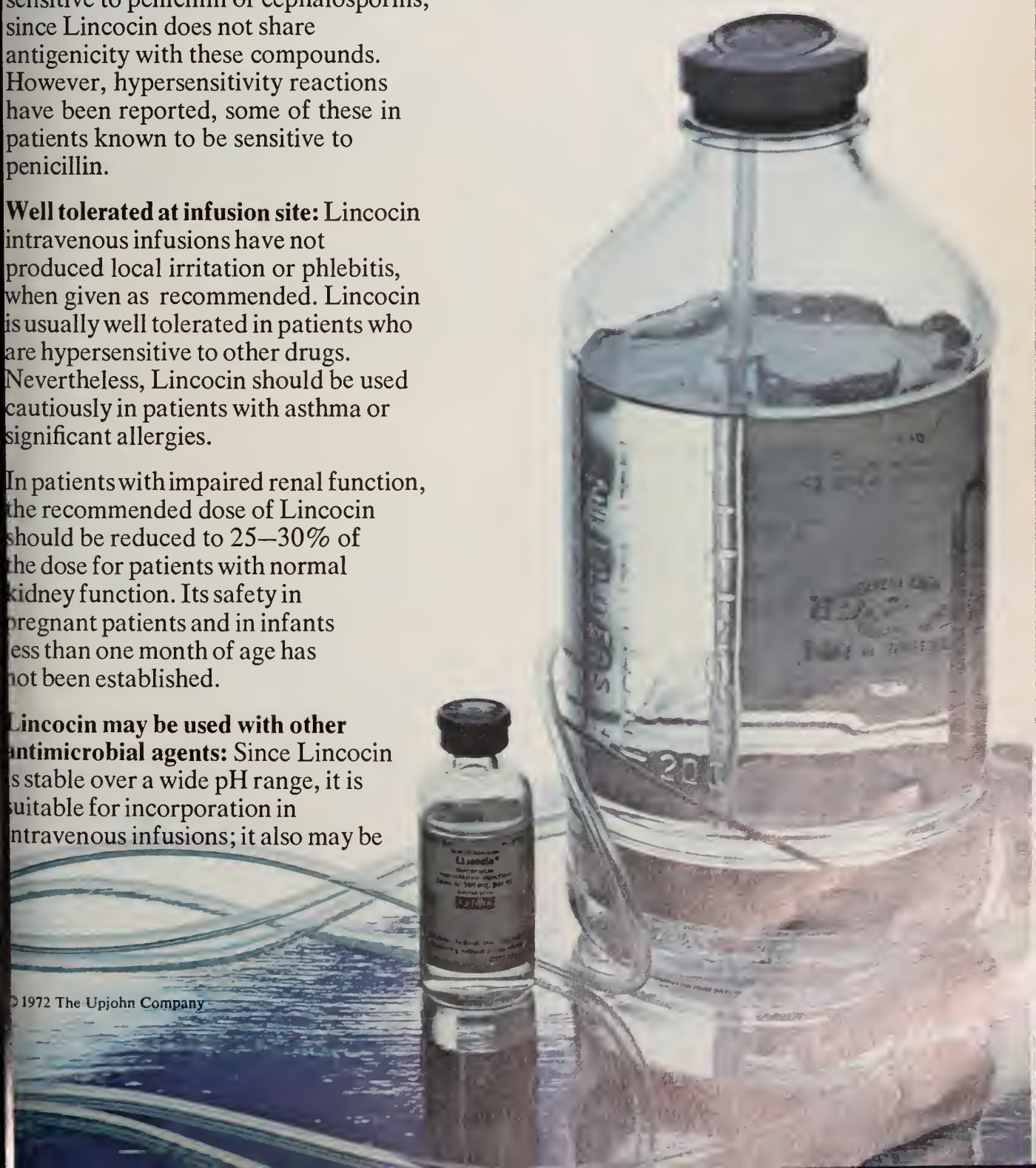
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



© 1972 The Upjohn Company



Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatm*Skin and mucous membranes*—Skin ras urticaria, vaginitis, and rare instances of foliative and vesiculobullous dermatitis h been reported. *Liver*—Although no direct lationship to liver dysfunction is establish jaundice and abnormal liver function t (particularly serum transaminase) have b observed in a few instances. *Cardiovasc* —Instances of hypotension following par teral administration have been report particularly after too rapid IV adminis tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more adn istered IV, dilute in 500 ml of fluid administer no faster than 100 ml per h *Special senses*—Tinnitus and vertigo h been reported occasionally. *Local reacti* —Excellent local tolerance demonstrated intramuscularly administered Linco (lincomycin hydrochloride). Reports of p following injection have been infrequ Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distil water or normal saline has produced local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500* Capsules—bottles of 24 and 100. *Ste Solution, 300 mg per ml*—2 and 10 ml v and 2 ml syringe. *Syrup, 250 mg per 5* —60 ml and pint bottles.

For additional product information, con the package insert or see your Upjo representative.

MED B-6-S (KZL-7) JA71-16

The Upjohn Company
Kalamazoo, Michigan 49001

Upjoh

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XIII, NUMBER 9
SEPTEMBER 1972

EDITORIALS

Slaughter on the Mississippi Highways—Must It Continue?

THE DEPARTMENT OF Transportation and the National Safety Council continue to remind us that Mississippi ranks highest among the 50 states in highway deaths per 100 million miles traveled. We ranked first in 1971 and are close in the race for first in 1972. With nearly 58,000 highway deaths projected for 1972, Mississippi will account for nearly 1,000. With Mississippi's having only one per cent of the national population, this is a disproportionate number.

As pointed out in an editorial by Mr. Rowland B. Kennedy in the February 1971 issue of this journal, auto safety figures are tricky. Granted that this is true and also granted that Mississippi may not really be the leader nationwide in highway fatalities, it still seems to this writer that the physicians of Mississippi who are called to patch up the victims of many tragic highway accidents should be leading the effort to reduce them.

The purpose of this editorial is to encourage the 1,700 physicians of Mississippi to speak up and to speak out on a matter of such importance. As physicians, we exert more influence than we realize. Lieutenant Governor William Winter, speaking to a group of citizens in northeast Mississippi recently, pointed out that state laws are changed and appropriations voted only when public sentiment supports such action. A prime example is the $600,000,000 bond issue for highways, approved by the 1972 Legislature. This came about due to the concerted action of such organizations as HOPE, the East Mississippi Council, and other groups. If any money is to be voted for the control of death on the highways, it will be in response to public sentiment, aroused by physicians and other responsible citizens. This will certainly cost a considerable amount of money, but like the bonds voted for highway improvement, it will be well worth it.

I believe that many of the following suggestions need to be acted upon before we can expect improvement in our highway death rate.

1. We need to teach and establish a new respect for the law and for the rights of others. W. J. Cash in his brilliant study of the South, "The Mind of the South," points out that the Scotch-Irish who settled here (and particularly those who settled in Mississippi) were intense individualists who had little respect for any authority and preferred to take the law into their own hands. Even today this is seen in the belief of many individuals that they have a "right" to drive an automobile (regardless of competence to do so). This intense individualism had little effect in frontier times. Now with the individual driving a two-ton projectile that speeds up to 100 miles per hour, the effect can be quite different. We should begin by teaching our children that they earn the privilege of driving an automobile.

2. We need to deal more effectively with the problem of the drunken driver. The implied consent law and the use of the intoximeter are major steps forward. However, we need a uniform system of statewide courts and uniform penalties. Too often, in case of a fatal accident, it is found that one of the drivers was driving without a license, his license having been revoked.

3. We need to have more traffic inspection blocks. The statement is made that we don't have enough state police to do this. Why not double

the number of state police? Enough blocks should be set up so that every Mississippi driver should be checked twice yearly. This would pick up the intoxicated driver as well as the one without a valid license. The writer has not encountered a traffic block in Lee County in the past four years.

4. Our driver license laws need revision, and the program needs more personnel. The present force, responsible chiefly for examination for new drivers (mostly 15 year olds), is doing an excellent job in their field of action. However, rather than automatic renewal indefinitely, it should be mandatory to repeat the examination every five years and perhaps every year after age 65.

Of particular interest to physicians is the question of whether or not a physician may reveal to the traffic department that one of his patients is not a qualified driver. The rule, of course, for many years has been that a physician keeps confidential all facts revealed to him by his patient during a course of treatment. Should this law be changed? How do we balance the "right" of a patient to ask the doctor to keep confidential that fact that he is an unsafe driver, against the "right" to live of future victims of this unsafe driver?

5. We need some improvement in our motorcycle and motorbike regulations. Too often, children under 15 years of age with no driver's license are seen on our streets. Also, about half of them in North Mississippi do not wear protective helmets. These laws should be enforced.

With the new four-lane highway program which is scheduled to be completed in 1987 we may have some increase in traffic safety. However, even if this were completed next year, I think that our highway deaths would not decline appreciably unless we have (1) more respect for the law in regard to the driver's license, (2) tougher penalties on the drunk driver, (3) massive traffic blocks to rid the highways of drunken drivers and unlicensed drivers, (4) much tougher license examination laws, and (5) much better enforcement of our motorcycle laws.

All of these may be expensive programs and may cause some inconvenience to many people. However, we can tolerate the inconvenience and the expense if lives are to be saved. Why as physicians do we not talk up such changes to our friends, our service clubs, our church groups, our PTA groups, our legislators, and anyone else who will listen?

THOMAS W. WESSON, M.D.
Associate Editor
Tupelo, Miss.

cetera. Passage of various sections makes the individual eligible for certification as certified medical assistants, administrative, or certified medical assistants, clinical.

Ask your secretary or nurse if she is a member. If not, ask her to join the association. Pay her dues out of office expense: it will be a sound investment. Only through physician encouragement will the association become the important asset to medicine that it can be. ★★★

MSBH Now Records Occupational Injuries

The rate of disabling work injuries in manufacturing industries increased .4 per million employee-hours worked in 1970, according to Dr. Hugh B. Cottrell, Executive Secretary, State Board of Health. This rate was derived from the old Work Injury Program statistics.

A new system of recordkeeping and reporting established under the Occupational Safety and Health Act will provide rates on an annual basis. This system began with the report period July 1-Dec. 31, 1971, according to Dick Whitehead, director, Occupational Safety and Health Division, State Board of Health.

Additional information and assistance concerning industry related injuries may be obtained by writing to Mrs. Dianne McDonald, Mississippi State Board of Health, P. O. Box 1700, Jackson, or by calling 354-6635.



POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Sept. 25-29, 1972

RADIOLOGY INTENSIVE COURSE
University Medical Center, Jackson
Sept. 25-29, 1972, beginning at 8 a.m.
Sponsored by the University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Robert D. Sloan, M.D., professor of radiology and chairman of the department, The University of Mississippi School of Medicine

This one-week intensive course will feature practical observations of radiological procedures in diagnostic, therapeutic, and isotope areas, as well as sessions dealing with equipment, techniques, artefacts and radiation safety. Registrants will participate in conferences which stress both the value and limitations of clinical radiology.

Oct. 2-6, 1972

ELECTROCARDIOGRAPHY INTENSIVE COURSE
University Medical Center, Jackson
Oct. 2-6, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Thomas M. Blake, M.D., professor of medicine, The University of Mississippi School of Medicine

Selected for their immediate applicability, topics in this one-week intensive course will be supplemented by use of electrocardiograms, slides and other visual aids. Participants will interpret electrocardiograms and join in conferences.

Oct. 9-13, 1972

STROKE AND NEUROLOGICAL DISEASE INTENSIVE COURSE
University Medical Center, Jackson
Oct. 9-13, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinators:
Robert D. Currier, M.D., professor of medicine (neurology), The University of Mississippi School of Medicine, and co-director, demonstration stroke unit, Mississippi Regional Medical Program
Armin Haerer, M. D., associate professor of medicine (neurology), The University of Mississippi School of Medicine

Participants will study in-depth management of acute stroke patients, seizure problems, and other neurological and neurosurgical disorders. The course will also emphasize day-to-day care of patients in the Mississippi Regional Medical Program demonstration stroke unit.

FUTURE CALENDAR

Sept. 18-22, 1972
NEPHROLOGY INTENSIVE COURSE

Sept. 25-29
RADIOLOGY INTENSIVE COURSE

Oct. 2-6
ELECTROCARDIOGRAPHY INTENSIVE COURSE

Oct. 9-13
STROKE AND NEUROLOGICAL DISEASE INTENSIVE COURSE

Oct. 10
CHEST DISEASE SEMINAR

Oct. 16-20
GASTROENTEROLOGY INTENSIVE COURSE

Oct. 23-27
PEDIATRICS INTENSIVE COURSE

Oct. 28
ANESTHESIA SEMINAR

Nov. 3-4
SURGERY SEMINAR

Nov. 6-10
OBSTETRICS INTENSIVE COURSE

Jan. 22-26, 1973
GASTROENTEROLOGY INTENSIVE COURSE

March 7
RENAL SEMINAR

April 30-May 3
MISSISSIPPI STATE MEDICAL ASSOCIATION
BILOXI

NEW MEMBERS

BILLUPS, WM. A., JR. Born Grenada, Miss., June 15, 1940; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1965; interned, same, one year; surgery residency, same, July 1966-July 1970; elected by East Mississippi Medical Society.

BLISSARD, THOMASINA. Born Houston, Miss., April 5, 1925; M.D., University of Mississippi School of Medicine, 1963; interned St. Thomas Hospital, Nashville, Tenn., one year; psychiatry residency, Tulane University, New Orleans, La. July, 1964-June 30, 1967; elected by Central Medical Society.

PARKER, WILLIAM HARRISON, JR. Born Jackson, Miss., April 4, 1944; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1970; interned, same, one year; elected by Central Medical Society.

MAY, ROBERT O. Born Meridian, Miss., Nov. 2, 1938; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1963; interned Memorial Hospital, Savannah, Ga., one year; ophthalmology residency, Medical College, Charleston, South Carolina, July 1, 1966-June 30, 1969; elected by Central Medical Society.

PERSONALS

CLYDE R. ALLEN has associated with C. D. BOUCHILLON and PHIL O. NELSON, JR., of Laurel in the practice of radiology at Jones County Community Hospital.

VIRGIL ISSAC AULTMAN has joined the staff of the Laird Clinic in Union. A family practitioner, Dr. Aultman received his M.D. degree from the University of Mississippi School of Medicine and interned at John Peter Smith Hospital in Fort Worth.

RAYMOND L. BROWN has associated with WALTER T. COLBERT and JAMES G. KRESTENSEN of Natchez for the practice of radiology and nuclear medicine at Jefferson Davis Memorial Hospital.

GUY D. CAMPBELL of Jackson has been elected Mississippi's representative director to the board of directors of the National Tuberculosis and Respiratory Disease Association.

EDWARD L. CARRUTH has associated with LAMAR THAGGARD and MACK FAIRCHILD at the Madden Medical Clinic for the family practice of medicine.

RICHARD H. CLARK, JR., of Hattiesburg spoke on first aid at a University of Southern Mississippi Safety Education Workshop.

MAXWELL C. COOKE and EDMUND C. DYAS have associated with the staff of the Hattiesburg Clinic at 415 S. 28th Avenue. Dr. Cooke specializes in obstetrics and gynecology, and Dr. Dyas is an orthopaedic surgeon.

DON S. DAVIS announces the opening of his office for the practice of ear, nose and throat, maxillofacial and plastic surgery of the head and neck at St. Joseph Medical Plaza, Highway 39 North in Meridian.

JOHN B. EDWARDS announces the opening of his office located in Gulf Towers, Suite 707, Biloxi. Dr. Edwards limits his practice to plastic, cosmetic, reconstructive and hand surgery.

ROBERT B. HARPER of Fayette was presented a plaque making him lifetime Chief of Staff, Emeritus, by the medical staff and administration of Jefferson County Hospital. Dr. Harper has practiced medicine for 58 years.

JAMES C. HAYS, ROBERT L. ABNEY, JACK RATLIFF, ERIC MCVEY, JR., BERNARD BOOTH, JESSE WOFFORD, JOE NORMAN, CAMILLA A. PROCTOR, JEANETTE PULLEN, all of Jackson, W. L. JAQUITH of Meridian, and JOHN EVANS of Vicksburg were speakers at the 6th annual Mississippi College Health Education Workshop.

B. E. HEWITT of Summit served as a medical missionary for the Foreign Mission Board of the Southern Baptist Convention in Ajloun, Jordan, for three weeks in August.

WILLIAM LOBRANO has associated with GEORGE W. BYRNE and W. K. STEWART for the family practice of medicine at 1213 Broad Avenue in Gulfport and 130 Fleitas Avenue in Pass Christian.

ELLIS MOFFITT of Jackson has been elected president of the Southeast region of the American Association for Clinical Immunology and Allergy.

JIM G. NORRIS, II, announces the opening of his office at 450 Pass Road in Gulfport. Dr. Norris limits his practice to medical neurology, electroencephalography and electroneuromyography.

Why send him to the islets of Langerhans?



Since sulfonylureas promote the release of insulin which is lipogenic and helps transport glucose into adipose tissue...

And since many overweight patients already have normal or high levels of endogenous insulin, why not consider DBI-TD?

It lowers blood sugar without stimulating insulin secretion from the pancreas. And this may be important to the dieting diabetic.

In adult-onset, nonketotic diabetics uncontrolled by diet alone...

DBI-TD® **Geigy**
phenformin HCl

lowers blood sugar without raising blood insulin.

DBI® phenformin HCl
Tablets of 25 mg.
DBI-TD® phenformin HCl
Timed-Disintegration
Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoxemia.

Warnings: Use during pregnancy is to be avoided.

Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.

Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
(B) 98-146-103-D (6/72)

For complete details, including dosage please see full prescribing information.

GEIGY Pharmaceuticals
Division of
CIBA-GEIGY Corporation
Ardsley, New York 10502

DBI 8666



a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® Tablets, brand of pentazocine (as hydrochloride), can be compared to codeine in analgesic efficacy, Talwin is not subject to narcotic controls. Patients receiving Talwin Tablets for prolonged periods face fewer of the consequences you've come to expect with meperidine or codeine. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe – day or night – even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Inereased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnaney. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependenee. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Aeute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Funetion. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used wi caution in patients about to undergo surgery of the biliary tra

Patients Receiving Narcotics. Talwin is a mild narcotic antagoni Some patients previously receiving narcotics have experienced m withdrawal symptoms after receiving Talwin.

CNS Effeet. Caution should be used when Talwin is administer to patients prone to seizures; seizures have occurred in a few su patients in association with the use of Talwin although no cause a effect relationship has been established.

Adverse Reactions: Reactions reported after oral administrati of Talwin include *gastrointestinal:* nausea, vomiting; infrequen constipation; and rarely abdominal distress, anorexia, diarrh *CNS effects:* dizziness, lightheadedness, sedation, euphoria, he ache; infrequently weakness, disturbed dreams, insomnia, synco visual blurring and focusing difficulty, hallucinations (see *Ac CNS Manifestations* under WARNINGS); and rarely tremor, ir tability, excitement, tinnitus. *Autonomic:* sweating; infrequen flushing; and rarely chills. *Allergic:* infrequently rash; and rare urticaria, edema of the face. *Cardiovascular:* infrequently decrea in blood pressure, tachycardia. *Other:* rarely respiratory depressio urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose 1 tablet (50 mg.) every three or four hours. This may be increas to 2 tablets (100 mg.) when needed. Total daily dosage should n exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in ad tion to analgesia, aspirin can be administered concomitantly wi Talwin.

Children Under 12 Years of Age. Since clinical experience in ch dren under 12 years of age is limited, administration of Talwin this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have receiv Talwin orally for prolonged periods have not experienced wit drawal symptoms even when administration was abruptly disco tinued (see WARNINGS). No tolerance to the analgesic effect h been observed. Laboratory tests of blood and urine and of liver a kidney function have revealed no significant abnormalities aft prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin ov dosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and oth supportive measures should be employed as indicated. Assisted controlled ventilation should also be considered. Although nal phine and levallorphan are *not* effective antidotes for respirato depression due to overdosage or unusual sensitivity to Talwin, p enteral naloxone (Narcan®, available through Endo Laboratories) a specific and effective antagonist. If naloxone is not available, p enteral administration of the analeptic, methylphenidate (Ritalin may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contai Talwin (brand of pentazocine) as hydrochloride equivalent to 50 m base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (1583

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

J. Lee Owen of Jackson and F. T. Carey and M. Shelby Smith of McComb have been elected to Fellowship in the American Academy of Pediatrics.

William Thomas Robinson, Sr., has associated with Jack Sartin of Clarksdale for the practice of general and thoracic surgery at the Clarksdale Surgical Clinic, 110 Yazoo Street.

Omar Simmons of Newton was elected to honorary membership in the Mississippi Hospital Association during the MHA 41st annual convention in Biloxi. Dr. Simmons has served as both MSMA and MHA president.

Tommy T. Simpson has joined the staff of the Ripley Medical Center as a family practitioner.

H. K. Stauss of Jackson presented a program on close-up photography for the Mooreco Photo Lecture Seminar series in Jackson.

Margaret Van Dyke has been appointed director of health services for the Meridian public schools. Dr. Van Dyke is formerly from Memphis and worked with the University of Tennessee child development program.

James Warrington of Shelby announces the association of his brother, Paul Warrington, in family practice at the Warrington Clinic.

James A. Watt announces the opening of his office for the practice of psychiatry at Suite 6, Propst Building, 413 4th Avenue South in Columbus.

F. E. Werkheiser of Jackson announces the relocation of his offices at 500-P East Woodrow Wilson Drive.

Thomas W. Wesson and J. Leighton Pettis of Tupelo announce the relocation of their offices at 610 Brunson Drive.

Reginald P. White of Meridian has been named president-elect of the Mississippi Psychiatric Association.

J. Stewart Williford has associated with William Gary Giles of Hattiesburg for the practice of orthopaedic surgery at the Medical Arts Building, 405 South 28th Avenue.

S. Jobe Wilder, Jr., and Thomas W. Talkington, Jr., of Jackson announce the relocation of their offices at 1814 Hospital Drive.

Victor W. Yawn, Charles D. Guess, John E. Mann and Billy N. Watkins of Jackson announce the formation of the Southwest Jackson Family Clinic at 5429 Robinson Road.

DEATHS

Sayle, Robert P., M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1955; interned John Gaston Hospital, Memphis, Tenn., one year; pediatric residency, same, July 1, 1962-July 1, 1964; died July 12, 1972, age 57.

Stewart, Leo O., M.D., Louisiana State University School of Medicine, New Orleans, La., 1950; interned Riverside County General Hospital, Arlington, Cal., one year; died July 25, 1972, age 62.

Tillman, Albert G., M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1944; interned Scott & White Hospitals, Temple, Texas, Jan. 1, 1945-Sept. 30, 1945; surgery residency, same, 1945-46; surgery residency, Mercy Hospital, Vicksburg, Miss. 1946-48; died July 26, 1972, age 50.

Long-Term Care Council Formed

The American Geriatrics Society has announced the organization of a Council for Long-Term Care of Geriatric Patients "to bring together in common effort representatives of the most important groups involved in the health and welfare of the aged."

At the first meeting of the council, Dr. Leslie S. Libow, Elmhurst, N. Y., chief of geriatric medicine at Mount Sinai City Hospital Center, was elected chairman. Vice chairmen are Lynn W. Norris, Silver Spring, Md., executive vice president of the American College of Nursing Home Administrators and Ruth Bennett, Ph.D., New York, N. Y., principal research scientist with the Gerontology Unit of the New York State Department of Mental Hygiene.

Dr. Irving S. Wright, New York, N. Y., American Geriatrics Society Board chairman who chaired the organizational meeting of the council, said; "it is hoped that the new group can spearhead a united attempt to relieve the three-sided burden on the aged wherein economic, sociological and health inadequacies are inevitably interrelated."

Other national organizations represented at the first meeting of the council were the American Medical Association, the U. S. Department of Health, Education and Welfare, the American Nursing Home Association and the Gerontological Society.

State M.D. Receives Heart Study Grant

The Myocardial Infarction Branch of HEW's National Heart and Lung Institute has awarded 8 contracts totalling $411,437 for studies seeking effective means of protecting heart muscle from the effects of diminished or absent bloodflow (ischemia), thus reducing the extent and severity of heart damage resulting from acute heart attacks. The new studies will extend and complement research on this subject begun under 6 NHLI contracts awarded last year.

The present studies will attempt to define ischemia-induced derangements in heart-muscle cells that may lead to irreversible damage or destruction and seek to develop therapeutic procedures that, if initiated soon after onset of the acute attack, may minimize the loss of functioning heart-muscle tissue by reclaiming all that can be salvaged from ischemic damage.

Among the recipients is Dr. Carl E. Jones of the University of Mississippi School of Medicine who received a grant of $40,044.

Dr. Jones and co-workers will seek to determine whether heart-muscle damage due to ischemia can be prevented or reduced by drugs that block the degradation or release of these nucleotides.

Lilly Now Uses Safety-Closure Tops

Eli Lilly and Company has announced that it is now packaging aspirin, aspirin-containing products, and Darvon® products in bottles with safety-closure caps.

Safety closures are used on all consumer packages containing these products, but larger dispensing packages will not have them. However, these bulk packages will carry the statement "Container not for household use."

The Lilly safety closures are of the push-down, turn-off type and palm-turn-off type. The company worked with the closure manufacturers on their development and the later refining of the design, endurance, and production application of each closure. More than 1,000 children and a larger number of adults participated in tests of the closures conducted by the Lilly consumer preference laboratory. The caps meet the federal requirements that 85 per cent of the children under 51 months of age in the test fail to open the closures.

Under the authority of the Poison Prevention Packaging Act of 1970, the Food and Drug Administration now requires that aspirin or aspirin-containing products must be sold to the consumer in a container with a safety closure. Beginning Oct. 24, this requirement will be extended to include the packaging of products subject to control under the Controlled Substances Act; and at a later date it also will include all oral prescription products and certain over-the-counter products.

Elderly or handicapped adults may have difficulty in opening a container with a safety closure. In such cases, physicians or purchasers may request that the product be dispensed in a container without a child-resistant closure.

Jaycees, SBH Combat Venereal Disease

State Board of Health officials and representatives from the Mississippi Jaycees met recently to organize a joint program for prevention and control of venereal disease in the state, according to Dr. Hugh B. Cottrell, State Health Officer.

Outlining the informative program to the group was G. T. "Tom" Pippen, III, of Greenwood who is state chairman of the Jaycee VD Education Project.

"We work very closely with school administrators, local physicians, and school nurses in our presentations before students," he stated. "Reaching teenagers through this method has already proved effective."

Pippen was referring to the success which the Jaycees had in the LeFlore County area last year when local Jaycees presented their slide programs, and with the aid of doctors or nurses conducted question-and-answer periods in various school systems.

Dr. Durward Blakey, director of Preventable Disease Control, State Board of Health, spoke in behalf of that agency, "The Board of Health will back the Jaycees in every possible way to insure the opportunity for students and adults throughout the state to have access to this vital information."

State Jaycee president, Mike McElhaney of Pascagoula, added "since venereal disease is the number one communicable disease in the nation, this kind of statewide effort is long overdue."

Book Reviews

A Decade of Progress: The United States Army Medical Department, 1959-1969. Prepared under the direction of Lt. Gen. Hal B. Jennings, Jr., The Surgeon General, U. S. Army. 214 pages with illustrations. Washington, D. C.: Government Printing Office, 1971. $2.25.

Contained in this small well written volume are many rather remarkable advances in military medicine and surgery.

Aeromedical evacuation of wounded from the battlefield, functioning together with an almost incredible communications system, permitted the delivery of critically wounded or injured troups directly to the proper hospital best staffed and equipped to handle that particular wound or injury. It has been observed that the critically wounded on the battlefields in Vietnam receive better care than do the injured on the highways in America.

The enormous research efforts to prevent the various insect-borne diseases, especially chloroquin resistant falciparum malaria, are graphically recorded. The lessons learned from modern day war surgery must not be forgotten or overlooked. Many of the surgical advances are readily applicable to the care of the injured in natural disasters.

Throughout this decade of remarkable progress is woven the thread of the remarkable leadership of Lt. Gen. Leonard D. Heaton, the Army Surgeon General. General Heaton became a living legend in the Army medical service by proving, through personal example, that the Army physician or surgeon can continue to perform top flight professional work, utilizing all his talents and skills, while handling immense administrative responsibilities. This is a part of the rich heritage that he left to young officers in the Army medical service. He succeeded in helping to abolish the erroneous belief that as Army physicians are advanced to senior rank, they are doomed to forego participation in professional efforts.

ROBERT E. BLOUNT, M.D., Jackson, Miss.

The Pediatric Nurse Practitioner. First Edition. By Fernando J. deCastro, M.D., and Ursula T. Rolfe, M.D. 138 pages with illustrations. St. Louis: The C. V. Mosby Company, 1972. $6.50.

With the present shortage of pediatric health manpower, the appearance of this book seems very timely and appropriate. A pediatric nurse practitioner is a nurse who has completed an intensive training program in ambulatory pediatrics. As stated in the preface, this hard-backed manual is intended as an outline to allow nurses to expand their empirical knowledge of ambulatory pediatrics by an orderly exposure to its different aspects, and it is also intended as a reference which recent pediatric nurse practitioner graduates may consult while gaining practical experience. It may be used as a reference for public health nurses and nurses working in a doctor's office who have never received formal training as pediatric nurse practitioners.

The first section of the book deals with the appraisal of the child and this includes the history, physical examination, laboratory procedures, immunizations and nutrition. The chapters are simply written and do not go into great detail; however, a surprising amount of material is covered. After learning this material and gaining some practical experience, I would think the nurse would be very competent in recognizing and diagnosing most pediatric problems.

The second section of the book describes various clinical problems encountered and is outlined under the various organ systems. A number of disease states are briefly described in classic form. More information would be gained if the book were studied along with a practical course or if pictures and illustrations were used in conjunction with the study of these chapters.

In the third and last section, various social problems are described. Chapters dealing with health care and delivery, the expanded role of the nurse, and family and school problems are quite well-written and orient the reader to the existing problems.

I would recommend this excellent book to all nurses who are interested in expanding their role in the delivery of health care to children. It would also fit beautifully into a pediatric nurse practitioner training program, being the basic course outline.

ROBERT L. ABNEY, III, M.D., Jackson, Miss.

MHA Announces 1973-74 Research Grants Program

The Mississippi Heart Association has announced its 1973-74 research grants and fellowships program.

The resarch program, supported entirely by gifts to the annual Heart Fund campaign, was established to aid in the development of cardiovascular research, and of future leaders in the broad field of cardiovascular function and disease.

As a minimum objective, the association endeavors to spend half of its gross receipts on research defined as scientific investigation in the field of health or disease designed to furnish new knowledge, or to provide further support for existing knowledge, relating to cardiovascular matters.

Each year the association awards no less than 12.5 per cent of its contributions to the national program. No less than $20,000 is awarded yearly to the University Medical Center in support of the Love Memorial Chair of Cardiovascular Research.

Research fellowships are established in departments in Mississippi institutions of higher learning engaged in cardiovascular research. Departments must apply each year for continuation of fellowships which carry a stipend of $6,000 plus a dependency allowance of $500.

Individual investigators are given grants-in-aid from $1,000 to $4,000, as funds are available, to encourage support of basic and clinical research in cardiovascular function or disease, or in related fundamental problems. Grants are made for one year, and the project must have the approval of the department chairman.

Application forms may be requested at any time from MHA, P.O. Box 16063, Jackson, Miss. 39206. The telephone number is 362-6945. Deadline for receipt of fellowship and grant-in-aid applications is Nov. 1, 1972.

Applications approved for funding will be announced in May 1973 for the year beginning July 1, 1973. The doctoral degree is required for all categories.

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Pre-Sate®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

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- low potential for abuse
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Effective anorectic adjunct to your program of caloric restriction and diet re-education

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GP-21-B/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant


Pink isn't exactly his color,
but he loves it for a change.
WinGel®
aluminum-magnesium hydroxides
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For your ulcer and ulcer-prone patients...
a refreshing break from the
boring sameness of white antacids.
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Drs. Martin and Jenkins Announce Format for the 105th Annual Session

Preliminary plans and schedules for the 105th Annual Session set for Biloxi, April 30-May 3, 1973, were made in a Council on Scientific Assembly meeting held at association headquarters in July. This was the announcement of Dr. Raymond S. Martin, Jr., of Jackson, chairman of the council, and Dr. Charles R. Jenkins of Laurel, president of the association.

On the meeting agenda are the House of Delegates and reference committees for Monday with the final meeting of the policy-making body scheduled for Thursday afternoon.



The Council on Scientific Assembly met recently at MSMA headquarters in Jackson to formulate plans for the 105th Annual Session set for April 30-May 3, 1973, at Biloxi.

The seven scientific sessions will again offer top guest essayists in 1973. On Tuesday, May 1, the morning will feature the section on surgery. That afternoon the section on pediatrics will meet. On Wednesday, May 2, the morning session will simultaneously present the section on ob-gyn and section on medicine. The afternoon offers programs by the section on general practice and section on preventive medicine. On Thursday morning, May 3, the section on EENT will meet.

Drs. Martin and Jenkins said that as many as 12 specialty societies will meet concurrently with the annual session, usually selecting a day adjunctive to general scientific meetings concerned with the particular specialty. Of further interest will be specialty society luncheons and dinner occasions.

The Woman's Auxiliary will meet concurrently with the MSMA annual session for its 50th annual session. Mrs. Clarence H. Webb, Jr., of Jackson is president.

Dr. Martin said that medical alumni groups representing Ole Miss, Tulane and Tennessee are scheduling social occasions. Ole Miss will meet on Monday, April 30, both in a business session and for an evening dinner and dance party. Tulane and Tennessee medical alumni will meet on Tuesday, May 1, Dr. Martin said.

Expected to meet during the 105th Annual Session are the Mississippi Academy of Family Physicians, Society of Internal Medicine, Ob-Gyn Society, EENT Association, Association of Pathologists, Psychiatric Association, Radiological Society, American College of Surgeons, and Urological Society.

Special events will include the Fifty Year Club, Past President's Breakfast, and the annual association fellowship party.

Delegates will meet on Monday to receive reports and resolutions which will be discussed before reference committees that afternoon. The Nominating Committee will conduct open sessions Wednesday, and on Thursday, the House will take final actions on business and policy, electing 1973-74 officers as the final order of business.

Dr. Arthur A. Derrick, Jr., of Durant will be inaugurated 1973 president at the adjourned meeting of the House of Delegates, and new officers will assume their respective posts at that time.

Technical and scientific exhibits will also be featured during the four-day annual session.

Dr. A. V. Beacham Named to CHP Council

Dr. Aubrey V. Beacham of Magnolia has recently been appointed to the State Health Planning Advisory Council to the Division of Comprehensive Health Planning by Gov. William L. Waller. The governor presented the certificate of appointment to him at the quarterly meeting of the council in Jackson.

Dr. Beacham, a retired physician and surgeon, is an active farmer, cattleman, and forester. He received his B.A. Degree from Millsaps College and his M.D. Degree from Tulane. Dr. Beacham is affiliated with the American College of Surgeons, the International College of Surgeons, the American Academy of Family Physicians, the American Academy of Medicine and Surgery, the Mississippi Division of the American Cancer Society, the Mississippi Hospital Association, Mississippi Association of Hospital Governing Boards, Mississippi State Medical Association, and American Medical Association.

The 41-member council, chaired by William E. Ready of Meridian, is an advisory body to the Division of Comprehensive Health Planning, Office of the Governor, and is made up of consumers of health services, providers of health services, and heads of state agencies in the health care field. Dr. Beacham is a provider member of the council and has been appointed as chairman of the Special Funds Committee.



Gov. William L. Waller, at right, presents a certificate to Dr. A. V. Beacham of Magnolia appointing him to the State Health Planning Advisory Council.

The Division of Comprehensive Health Planning, headed by Dr. F. Lindsey Risher, is the state agency charged with the responsibility of formulating a state plan for health programs. The concept of comprehensive health planning is the mechanism through which the planning activities of all public and private health and health related agencies can be linked together.

This new type of planning, a continuous process, requires that those participating include both providers and consumers of health services. In the process, members of the State Health Planning Advisory Council deal with identifying health needs, inventorying resources and manpower, establishing priorities and recommending courses of action. Comprehensive health planning thus links governmental and non-governmental health and health-related agencies and groups in developing a coordinating approach toward achieving good health for every individual.

Chest Physicians Plan Scientific Assembly

Nine major medical symposia have been announced by the American College of Chest Physicians for presentation Oct. 24-26, 1972, at their 38th Annual Scientific Assembly in Denver.

Early airway obstructions, asthma, high altitude effects on chest diseases, critical care, lung biochemistry, complications affecting pulmonary function, environmental lung complications, developments in coronary artery disease and in tuberculosis are study areas selected by the College's Scientific Program Committee.

There will be two morning and one afternoon symposia on each day of the four-day Scientific Assembly, the College announced. Each symposium will include an open-discussion period. Symposia, chairmen and participants are:

Diagnosis of Early Airway Disease. *Chairman:* Dr. Peter T. Macklem, director, Department of Respiratory Diseases, Royal Victoria Hospital, and Associate Professor of Experimental Medicine, McGill University, Montreal. *Participants:* Drs. N. R. Anthonisen, Montreal; Ruy V. Lourenco, Chicago; Soina Buist, Portland, Oregon; Roland H. Ingram, Atlanta.

Reversible Obstructive Disease (asthma). *Chairman:* Dr. Charles W. Ewing, clinical instructor in pediatrics, Baylor College of Medicine, Houston. *Participants*: Drs. Ernest K. Cotton, Denver; Richard S. Farr, Denver; Thomas J. Luparello, Denver; William C. Deemer, San Francisco.

Cardiopulmonary Response to High Altitude. *Chairman:* Dr. John H. K. Vogel, clinical associate professor of pediatrics and medicine, UCLA; head of cardiology, Goleta Valley Community Hospital, Santa Barbara; medical director, Santa Barbara Heart and Lung Institute. *Participants:* Drs. L. Howard Hartley, Boston; John V. Weil, Denver; Robert F. Grover, Denver; Herbert N. Hultgren, Palo Alto.

Pulmonary Complications of Altered Immunologic Responses. *Chairman:* Dr. Gerald L. Baum, associate professor of medicine and chief, pulmonary section B, VA Hospital, Cleveland. *Participants:* Drs. Richard Hong, Madison, Wisc.; Martin McHenry, Cleveland; Ronald Blum, Bethesda, Md.; Lee B. Reichman, New York.

Occupational Lung Disease. *Chairman:* Dr. W. Keith C. Morgan, professor of medicine and director, Appalachian Laboratory for Occupational Respiratory Diseases, West Virginia University Medical Center, Morgantown, W. Va. *Participants:* Drs. Hans Weill, New Orleans; Raymond L. H. Murphy, Jr., Boston; William Anderson, Louisville; Margaret R. Becklake, Montreal.

Modern Approach to Coronary Artery Disease. *Co-chairmen:* Drs. Thomas J. Ryan, professor of Medicine, Boston University Medical Center, and head, Section of Clinical Cardiology, University Hospital, Boston; and Ben F. Mitchel, Jr., clinical associate professor of thoracic surgery, University of Texas Southwest Medical School, Dallas. *Participants:* Drs. Richard A. Carleton, Chicago; Maurice Adams, Dallas; Edward B. Diethrich, Phoenix; Lawrence S. Cohen, New Haven; Derward Lepley, Milwaukee.

Critical Care. *Chairman:* Dr. Max Harry Weil, clinical professor and director, University of Southern California School of Medicine, Los Angeles. *Participants:* Drs. Ben Eiseman, Denver; Thomas L. Petty, Denver; Herbert Shubin, Los Angeles; Eliot Corday, Los Angeles.

Clinical Perspectives of Lung Biochemistry. *Chairman:* Dr. Ruy V. Lourenco, professor of medicine and director, Pulmonary Disease Section, Abraham Lincoln School of Medicine, University of Illinois, Chicago. *Participants:* Drs. Gerald M. Turino, New York; Donald F. Tierney, Torrance, California; Sami I. Said, Dallas.

Tuberculosis—1972 (sponsored jointly by the American Thoracic Society and the American College of Chest Physicians). *Chairman:* Dr. John G. Weg, chairman, Scientific Assembly on Tuberculosis, American Thoracic Society, and Physician-in-Charge, Pulmonary Division, University of Michigan Medical School, Ann Arbor. *Participants:* Drs. Robert F. Johnston, Philadelphia; Vernon N. Houk, Atlanta; Paul Regan, Detroit.

The Scientific Assembly, scheduled for the Denver Convention Complex, will also include presentation of scientific papers, evening seminars, sunrise sessions, tutorials, luncheon panels, a motion picture clinic and fireside conferences.

Additional information and advance registration forms are available from: American College of Chest Physicians, 112 E. Chestnut Street, Chicago, Ill. 60611.

PMA Foundation Announces Grants

The PMA Foundation will award approximately 20 starter research grants aimed at helping young, post-doctoral investigators develop their independent research capabilities.

The grants will be effective Jan. 1, 1973. They are for $5,000 a year for two years, with the second year contingent on a continuing need for funds. About $200,000 of the foundation's funds are allocated for the program this year.

Research fields covered by the grants are pharmacology, clinical pharmacology and drug toxicology.

In developing the program, PMA foundation president C. Joseph Stetler said "the foundation was motivated by the belief that a very real need exists among beginning investigators for starter funds that could be used to generate data to serve as the basis to obtain greater amounts of support." He noted that the experience from the initial offering of the program, which drew over 150 applications, has proved this to be the case.

The first 20 research starter grants, beginning Jan. 1, 1972, went to schools of medicine, schools of pharmacy and veterinary schools in all parts of the United States.

Information describing this year's grant program will be mailed this week to colleges and universities throughout the country. Grants will be made to the institution on behalf of the applicant.

Those holding academic rank through assistant professor and investigators at the doctoral level with equivalent positions are eligible to apply for starter grants, provided their proposed research is neither directly nor indirectly subsidized to any significant degree by other support. Applicants will be judged on the merits of their proposed research and the degree of their need.

Deadline for applications is Oct. 1, 1972. Recipients will be selected by the foundation's board of directors, based on recommendations from its scientific advisory committee. Announcement of the awards will be made in December 1972.

Pinworm therapy is often a family affair



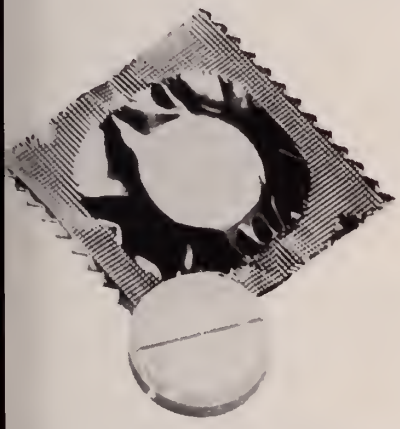


Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopen malodor of the urine, crystalluria, hematuria; appearance of li Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

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so easy to take everyone in the family will keep to the regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

addendum

MSD MERCK SHARP & DOHME

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



Antivert® (meclizine HCl) for vertigo*

...and then on to Venice

- Indicated in the management of nausea, vomiting and dizziness associated with motion sickness.
- Found useful in the management of vertigo associated with diseases affecting the vestibular system.
- Available as Antivert® (12.5 mg. meclizine HCl) blue and white scored tablets and also as Antivert®/25 (25 mg. meclizine HCl) yellow and white scored tablets.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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Med Students Train in Family Practice

Family practice training is now available to students in the Emory University School of Medicine.

The students will go to Columbus, Ga., for periods of study with family practice residents at The Medical Center—a 530-bed city-owned community hospital. Each resident physician in Columbus will have families under his care, and the Emory students will work under supervision of the residents.

The Columbus program will offer training for two types of Emory students. In their senior year, medical students can elect a two-month course in family practice. Also, students in the physician associate program, under the Division of Allied Health Professions, will have the option of taking their final (clinical) year at the Columbus hospital.

The new program for Emory students is part of a teaching affiliation between Emory and the Columbus Medical Center which has functioned for several years with emphasis on postgraduate education of physicians and other health professionals in the Columbus area.

This year on July 1, the Columbus hospital inaugurated an AMA-approved family practice residency program. Emory and Columbus officials explained that the growing public interest in family practice and the great need for family doctors led to the decision to enter the family practice training program in Columbus.

UMC Adds Five to Faculty

Five new full-time members have been named to the University of Mississippi School of Medicine faculty, including two at the assistant professor level and three instructors.

The Board of Trustees, Mississippi Institutions of Higher Learning, also named two staffers to University Hospital posts.

Dr. Anthony A. Cibulski, assistant professor of medicine, holds the B.E.E. degree from City College of New York and the M.D. from New Jersey College of Medicine. He interned and completed residency immediately prior to his appointment at the University Medical Center.

Dr. Howell W. Rogers is acting assistant professor of microbiology. He earned the B.A. and M.S. degree from the University of Mississippi and the Ph.D. at the University of Oklahoma Medical Center. Dr. Rogers has been a postdoctoral fellow since September 1970.

Instructors named are Dr. Pura Bandolon, obstetrics and gynecology; Dr. Arturo Molina, medicine and employee health physician, and Frank C. Salter, anatomy.

Malcolm Bruce Lightsey is new director of computer services at University Hospital. A native of Batesville, he earned the B.S. and M.S. at Mississippi State University, followed by training at the University of Tennessee Space Institute. Before his appointment, he was systems and operations manager at the Mississippi Research and Development Center.

Thomas R. Montgomery, the first to complete University Hospital's hospital administration residency program, is assistant hospital director. An Ole Miss graduate, he received the M.S. from the University of Alabama School of Hospital Administration. He has served as hospital administrative assistant since 1971.

EMCRO Exhibit Shown at MHA Convention



Discussing the association's Experimental Medical Care Review Organization are Mr. Sidney A. Smith, left, MSMA director of medical care plans and EMCRO project director, and Mr. Charles Flynn, executive director of the Mississippi Hospital Association. The EMCRO department sponsored and manned an informational exhibit at the hospital association's 41st annual session held in Biloxi in July.

Medical Device Hazards Studied

A broad variety of hazards are associated with the over 5,000 different medical devices in use today. Physicians, nurses and administrators are expressing increasing concern over both the safety and the efficacy of clinical equipment. The Emergency Care Research Institute of Philadelphia, a nonprofit agency, is undertaking a comprehensive study of this problem with the support of the Office of Medical Devices of the Food and Drug Administration.

A detailed index will be compiled of injuries, complications and deaths associated with improper design, manufacture, maintenance or use of all types of medical instruments, devices and systems. Hazards or inadequate performance in diagnostic and therapeutic devices found in hospitals, clinics, nursing homes, private medical offices, aid stations, ambulances and homes and used by health professionals, paramedical personnel or lay people, are being investigated.

Health professional and paramedical personnel are urged to contribute information in support of this continuing program to improve safety. All contributors may be assured that each problem will be investigated and resolved and will receive a complimentary copy of the final report. If you have ever encountered or do ever encounter a medical device which you feel is directly or indirectly responsible for injury or death to either a patient or the user, please notify ECRI by letter or telephone. Only information related to the device is necessary. Identification of your institution is not necessary unless you or your institution wish technical assistance in resolving a current problem or recognition for your assistance. The needed information includes:

1. Type of device (e.g. electrocardiograph, oxygen-powered resuscitator, heart valve, wheel chair, surgical dressing, etc.)

2. Mode of injury and effect on patient or user (e.g. laceration of hand by sharp-edged equipment housing, tissue reaction to implanted pacemaker, ventricular fibrillation and death due to electric shock by patient monitor, thrombosis and infection due to venous catheter, perforation of the uterus by IUD, etc.)

3. Cause of problem if identified with reasonable certainty (e.g. operator error in using defibrillator, broken plug and frayed electrical cord, microwave oven inhibition of pacemaker, uncalibrated spectrophotometer) or indicate if cause is unknown.

4. Name of manufacturer, model number and serial number of the device, if possible.

5. What action, if any, was taken to correct the problem or prevent future injuries (e.g. replaced with new equipment, rewired electric cord and plug, unknown)?

A standard short reporting form is available on request.

For further information, write: Health Devices Hazard Reporting System, The Emergency Care Research Institute, 913 Walnut Street, Philadelphia, Pa. 19107, telephone: (215) 923-5470.

Chicago Sets Frontiers of Medicine Series

Nine monthly programs have been scheduled for physicians attending the 1972-73 Frontiers of Medicine Series at the University of Chicago. The eighth annual series, held on Wednesday afternoons, starts Sept. 13, 1972. The programs consist of four or more lectures by faculty members of the University's Division of the Biological Sciences and The Pritzker School of Medicine and by guest lecturers. Sessions often include discussion periods.

The 1972-73 schedule is: Sept. 13, "Male and Female Infertility"; Oct. 11, "Recent Progress in the Management of the Complications of Streptococcal Infection"; Nov. 8, "Virology in Medicine"; Dec. 13, "Mind-Body Interaction"; Jan. 10, "Advances in Coronary Heart Disease"; Feb. 7, "Modern Clinical Approaches to Gastrointestinal Bleeding"; Mar. 7, "Nutrition in Prophylaxis and Therapy"; April 11, "Advances in Neurological Diagnosis and Treatment"; and May 9, "The Acutely Injured Patient."

The programs are sponsored by the Committee on Continuing Medical Education of the Division of the Biological Sciences and The Pritzker School of Medicine. Dr. Louis Cohen, associate professor in the department of medicine, is chairman of the committee.

The fee for the series is $100, or $15 for a single session. Lectures will be presented in Lecture Room P-117 (the Frank Billings Auditorium) of the University's Hospital and Clinics, 950 East 59th Street, Chicago.

The program is acceptable for 27¼ elective hours by the American Academy of Family Practice and for 27¼ credit hours for the Physician's Recognition Award of the American Medical Association.

Further information may be obtained from Frontiers of Medicine, Room 404, Culver Hall, The University of Chicago, Chicago, Ill. 60637, or by telephoning (312) 947-5271. Advance registration is requested.

Emory Gets Cancer Center Grant

The National Cancer Institute has awarded a two-year grant of $246,772 for planning a cancer center at Emory University.

The U. S. Congress, in a Conquest of Cancer bill passed in December 1971, recommended that many such new cancer centers be established in the country.

The project at Emory is under supervision of Dr. Charles M. Huguley, Jr., professor of medicine and director of a new interdepartmental cancer group in the Emory medical school.

"Our goal is the control of cancer," said Dr. Huguley. He said the government funds will be used to plan a comprehensive cancer center at Emory that will coordinate and expand various activities in research, training, and patient care.

The center will be designed to serve the people of Georgia as well as metropolitan Atlanta—a total population soon expected to reach five million.

Much of the planning grant will be used to employ a professional consultant group to study the range of Emory's resources and needs in the fields of research, training, and patient care as related to cancer, Dr. Huguley explained.

"We must project what our needs will be in 1980, and we intend to devote a total of two years to careful planning," he said.

"We expect to be ready to apply next year for a large grant from the National Cancer Institute to help establish and support a truly comprehensive cancer center at Emory. It is our goal to have these funds available in 1974."

Dr. Huguley pointed out that Emory University already is carrying out many of the functions of a cancer center. For example, he said, a significant number of patients at Emory University Hospital and Clinic are cancer patients, due to the emphasis placed on cancer treatment at these facilities for the past several decades.

At present the group of hospitals related to the Woodruff Medical Center, Emory University Hospital, Grady Memorial Hospital, Crawford W. Long Hospital, Henrietta Egleston Hospital for Children, and the Atlanta Veterans Administration Hospital, are seeing new cancer patients at a rate exceeding 2,500 per year, which amounts to about half of all such patients seen in Atlanta area hospitals and about one quarter of the new cancer patients in the state of Georgia, Dr. Huguley added.

"The number of cancer patients seen is steadily rising and can be expected to continue. This will require some increase in the number of beds needed for these patients," Dr. Huguley said.

Emory also has many training and research programs in cancer underway in other elements of the Woodruff Medical Center including the schools of medicine, dentistry, and nursing; the Division of Basic Health Sciences; and the Yerkes Regional Primate Research Center.

AAP Plans Annual Meeting

The American Academy of Pediatrics will hold its 41st annual meeting at the New York Hilton Hotel in New York City, Oct. 14-19.

Scientific papers will be presented during general sessions on subjects including: immunizations —progress and problems, school problems, what the pediatrician should know about atherosclerosis and its prevention, the drop-out, and exciting new developments in pediatrics.

Additional subjects will be covered during meetings of the AAP sections on allergy, anesthesiology, cardiology, child development, community pediatrics, diseases of the chest, military pediatrics, pediatric pharmacology, surgery and urology.

Areas to be covered in section meetings will range from changing roles and relationships in the delivery of child health care and nutrition in the postoperative patient, to adolescent life styles— 1972 version, and the malignant effects of racism in infancy.

Other features highlighting the annual meeting program include: 24 round tables covering such subjects as failure to thrive, renal disease, seizures, diabetes, health problems in families of migrant workers, education for human sexuality and intensive care units—equipment and monitoring; 12 seminars covering such areas of pediatrics as newborn and premature, infectious diseases and antimicrobials, nutrition, genetics and genetic counseling, psychiatry and child health in rural America; an informative motion picture program presenting films dealing with vital aspects of pediatrics to be shown on a regular scheduled basis during the annual meeting.

A final program will be distributed in early October.



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Call it what you will, it may be premalignant..

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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nd Efudex® (fluorouracil) 5% cream can resolve it.

ll it actinic, solar or senile keratoses, any regard it as "precancerous."[1,2]

pical fluorouracil, considered by some dermatologists to be a major vance in the treatment of multiple solar keratoses,[3,4] offers the physi- n a relatively inexpensive alternative to cryosurgery, electrodesic- ion and cold knife surgery. Of the topical fluorouracils available, only dex offers 2% and 5% solution and 5% cream formulations—formula- ns that have proved effective in the treatment of these mutliple lesions.

ual duration of therapy, 2 to 4 weeks.

dies showed that with the 2% and 5% Efudex preparations, the usual ation of therapy was only 2 to 4 weeks.[5] Other studies with topical rouracil revealed that when concentrations of less than 2% were d, significant numbers of lesions recurred.[6]

eats the lesions you can't see, too.

merous lesions, not apparent prior to 2% and 5% Efudex therapy, nifested themselves by definite reactions, while intervening skin ained relatively unaffected.[5] The early eradication of these subclini- lesions (which may otherwise have undergone further progression) bably accounts for the reduced incidence of future solar keratoses in ients treated with topical fluorouracil—especially with 5% centrations.[6]

w to identify solar keratoses.

ically, the lesion—a flat or slightly elevated brown to red-brown ule—is dry, rough, adherent and sharply defined. Multiple lesions the rule.

edictable therapeutic response.

response to a typical course of Efudex therapy is usually racteristic and predictable. After 3 or 4 days of treatment, erythema ins to appear in the area of keratoses. This is followed by a moderate ntense inflammatory response, scaling and occasionally moderate derness or pain. The height of this response generally occurs two ks after the start of therapy and then begins to subside as treatment topped. Within two weeks of discontinuing medication, the ammation is usually gone. Lesions that do not respond should biopsied.

rences: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, e & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: atment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *maceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, . 3. Belisario, J. C.: *Cutis, 6*:293, 1970. 4. Sams, W. M.: *Arch. Derm., 97*:14, 1968. ta on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and , E.: *Cancer, 25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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IN CONCLUSION

Britain's socialized medicine system will be shaken up for the first time since it was created 24 years ago if parliament approves a proposal submitted by the government, according to weekly AMA Newsletter. Proposed changes are aimed at decentralizing National Health Service to assure that regional and local authorities have stronger voice. Plan calls for 14 regional and 90 local authorities. Community healt councils would be appointed to represent patients' interests.

Companies that manufacture and market Springwall Chiropractic mattres and boxsprings were ordered by Federal Trade Commission to stop adver tising claiming their product is approved by American Chiropractic As sociation. Firms said products are "built to the specifications of the Posture Committee of ACA." Association received royalties (more than $379,500) for endorsement which was used for education, research and public service projects, according to the ACA Journal.

The average 1970 fees for initial office visits for six specialties have been reported in the 1972 Profile of Medical Practice, the "Red Book" compiled by the American Medical Association's Center for Healt Services Research and Development. The fees were $8.46, general prac tice; $9.95, pediatrics; $14.23, obstetrics-gynecology; $14.72, surge $17.81, internal medicine; and $32.64, psychiatry. Red Book is avail able from AMA, 535 North Dearborn Street, Chicago, Illinois 60610.

National Institute of Allergy and Infectious Diseases, a component of NIH, has developed a new type of influenza vaccine made of hybrid liv viruses and administered by nasal spray. Vaccine "holds future promi for the eventual control" of flu, scientists reported, and might be ready for use against next major flu epidemic, expected in late 1970s Although more tests must be conducted, experiments on prison voluntee indicated that spray provides full protection.

FDA has acted to make x-ray examinations safer by establishing new ra tion protection standards for diagnostic x-ray machines and component Requirements are set forth in an FDA standard specifying improvements manufacturers must make to reduce patient and operator x-ray exposure from diagnostic x-ray equipment produced after Aug. 15, 1973. FDA Commissioner Edwards said that "...it cannot be emphasized too strong that the benefits of x-ray diagnosis...far outweigh the risks."

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INSIGHT...

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A Fidelity Bond covering your employees is the answer for your protection and prevention of employee dishonesty.

FIRSTLY, most employees take pride in being bonded. SECONDLY, most employees know that a bonding company will demand full restitution. THIRDLY, the employer is protected in the event such a theft occurs.

Will his return to work mean the return of undue psychic tension?



When it's mandatory to keep the post-coronary patient calm, consider Valium (diazepam)

Although he's promised to take it easy back on the job, you know he's going back to the same stressful circumstances that may have contributed to his hospitalization. If he experiences excessive anxiety and tension because of overreaction to stress, your prescription for Valium can bring relief. During the period of readjustment Valium can quiet undue anxiety.

For moderate states of psychic tension, 5-mg or 2-mg Valium tablets *b.i.d.* to *q.i.d.* can usually provide reliable relief. For severe tension/anxiety states, the 10-mg tablets often produce desired results.

The most commonly reported side effects are drowsiness, ataxia and fatigue. Until individual response is determined, caution patient against driving or operating dangerous machinery.

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Valium® (diazepam)

For the tense cardiac patient who must be kept calm

Before prescribing, please consult complete product information, a summary of which follows:

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults*: Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients*: 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children*: 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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This Month . . . ER Management of Facial Trauma, Disseminated Intravascular Coagulation, Relative Efficacy





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ne possibility of side effects and
ne ultimate prospects of success
r failure.

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should be prescribed only as long
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October 1972



JOURNAL of the Mississippi
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CONTENTS

ORIGINAL PAPERS

Emergency Room Management of Facial Trauma **415** J. George Smith, M.D., Jackson, Mississippi

Disseminated Intravascular Coagulation **420** William B. Wilson, M.D., Jackson, Mississippi

SPECIAL ARTICLES

Relative Efficacy **427** C. Joseph Stetler, Pharmaceutical Manufacturers Association, Washington, D. C.

Radiologic Seminar CXXI: Hemomediastinum Associated with Anticoagulant Therapy **434** James M. Packer, M.D., Jackson, Mississippi

EDITORIALS

Report of the Delegates to AMA **437** C. D. Taylor, Jr., M.D., Pass Christian, Mississippi

Would You? **438** John H. Saffold, M.D., Knoxville, Tennessee

THIS MONTH

The President Speaking **436** 'Change Without Trauma'

Medical Organization **443** MSMA Board of Trustees Handled Full Agenda at August Meeting

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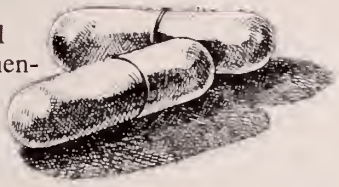
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arnings: Caution patients about possible combined effects th alcohol and other CNS depressants. As with all CNSing drugs, caution patients against hazardous occupations quiring complete mental alertness (*e.g.*, operating machinery, ving). Though physical and psychological dependence have ely been reported on recommended doses, use caution in ministering Librium (chlordiazepoxide hydrochloride) to own addiction-prone individuals or those who might increase sage; withdrawal symptoms (including convulsions), following continuation of the drug and similar to those seen with barurates, have been reported. Use of any drug in pregnancy, tation, or in women of childbearing age requires that its tential benefits be weighed against its possible hazards. As th all anticholinergic drugs, an inhibiting effect on lactation y occur.

ecautions: In elderly and debilitated, limit dosage to smallest ective amount to preclude development of ataxia, oversedan or confusion (not more than two capsules per day initially; rease gradually as needed and tolerated). Though generally recommended, if combination therapy with other psychopics seems indicated, carefully consider individual pharmalogic effects, particularly in use of potentiating drugs such as AO inhibitors and phenothiazines. Observe usual precautions presence of impaired renal or hepatic function. Paradoxical actions (*e.g.*, excitement, stimulation and acute rage) have en reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Complete literature available on request from Professional Services Dept. PML.

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NEWSLETTER

October 1972

ear Doctor:

ysicians unable to substantiate dates of hospital visits may be bjected to retroactive denial of Medicare benefits, AMA's Division f Medical Practice warns. Medicare requires documented evidence of spital visits. Recently some MDs have been directed to refund edicare payments made over a year ago. Each doctor neglected to ke entry on hospital record or give other acceptable proof.

> An AMA guide approved by SSA Bureau of Health Insurance says: "Acceptable evidence is physician's progress note on hospital record for day of visit, or nurse's notes indicating he visited patient that day. Patient's statement is acceptable only if taken within reasonable time after visit."

tional health insurance question is intercollegiate debate topic for 72-73 academic year. College and university forensic departments dicated clear-cut preference for that subject in nationwide poll. esolved: That the federal government should provide a program of mprehensive medical care for all U.S. citizens," is debate proposition.

though it does not intend to issue regulations on relative efficacy, A will continue to require language comparing safety or effectiveness henever the medical facts" justify it, said letter FDA Commissioner arles C. Edwards sent to PMA president C. Joseph Stetler in response repeated PMA requests for clarification of FDA policy.

tional Association of Blue Shield Plans Board of Directors has adopted e following statement: "Foundations for medical care are recognized mechanisms constituted to provide peer review. Foundations...and ue Shield Plans should work to develop mutually acceptable standards claims processing designed to facilitate peer review."

vironmental Protection Agency has awarded research and development ant to Pharmaceutical Manufacturers Association for studies on instry wastes. Project is to characterize drug industry wastes cording to present and future manufacturing processes and to define chnical procedures for establishing effluent standards.

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor

DBI® phenformin HCl Tablets of 25 mg. DBI-TD® phenformin HCl Timed-Disintegration Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoxemia.

Warnings: Use during pregnancy is to be a

Precautions: 1. *Starvation Ketosis:* This m differentiated from "insulin lack" ketosis a characterized by ketonuria which, in spite tively normal blood and urine sugar, may from excessive phenformin therapy, excess insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower formin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin with first checking blood and urine sugar.**

2. *Lactic Acidosis:* This drug is not recom

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Let's say you've decided that diet alone won't work in your adult-onset, nonketotic diabetic.

You're considering oral therapy for a new patient. DBI-TD or a sulfonylurea. Which?

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- Sulfonylureas promote release of insulin.
- Insulin is lipogenic and helps transport glu into adipose tissue.
- Overweight patients frequently have norm or high levels of endogenous in
- DBI-TD lowers blood sugar without stimulating insulin secretion fr the pancreas.

Usual dosage: one 50-mg. caps with breakfast may be effective, second capsule may be given wi the evening meal.

DBI-TD® Geig

phenformin HCl

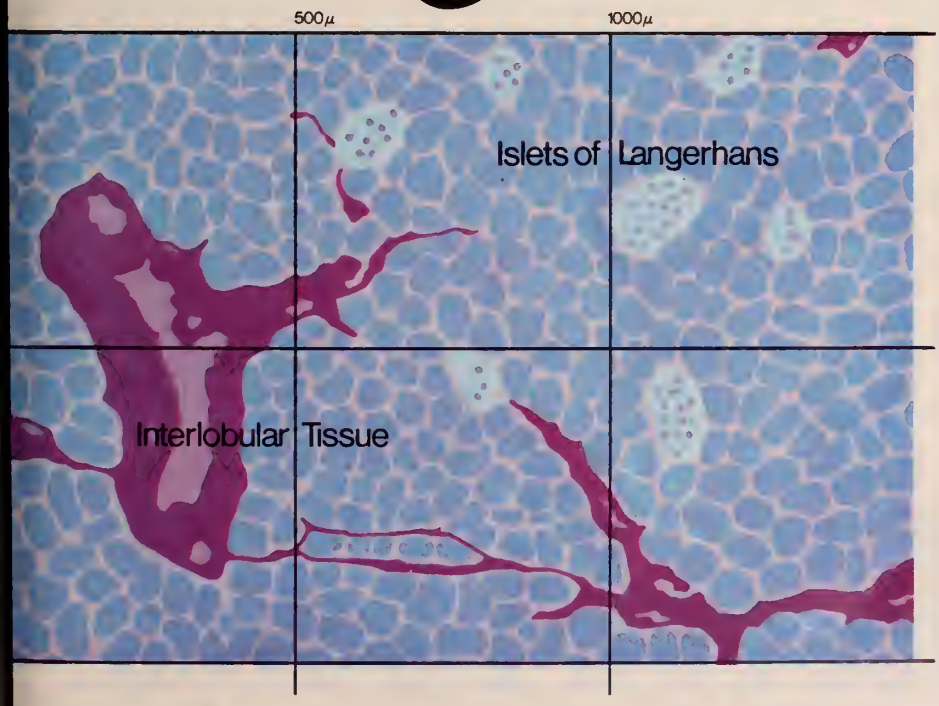
lowers blood sugar without raising blood insulin

the presence of azotemia or in any clinical
nation that predisposes to sustained hypoten-
n that could lead to lactic acidosis. To
ferentiate lactic acidosis from ketoacidosis,
iodic determinations of ketones in the blood
d urine should be made in diabetics previously
bilized on phenformin, or phenformin and
ulin, who have become unstable. If electrolyte
alance is suspected, periodic determinations
uld also be made of electrolytes, pH, and the
tate-pyruvate ratio. The drug should be with-
wn and insulin, when required, and other
rrective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.
Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
(B) 98-146-103-D (6/72)

For complete details, including dosage, please see full prescribing information.

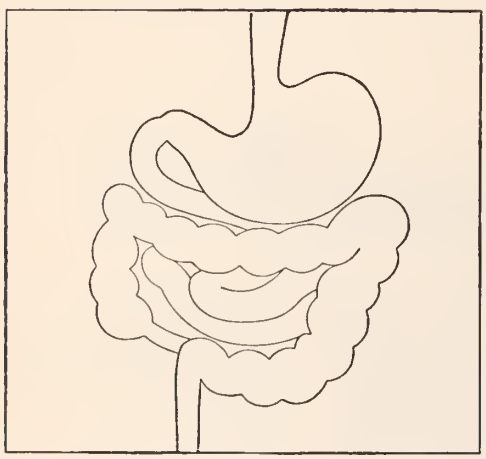
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Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

of Langerhans?



Before using DBI-TD or any oral hypoglycemic, please read the prescribing information concerning dosage, warnings, contraindications, precautions and adverse reactions.

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The GI tract in spasm is commonly a "gas trap."

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Each scored tablet contains: Specially activated simethicone 25 mg.; hyoscyamine sulfate 0.1037 mg., atropine sulfate 0.0194 mg., hyoscine hydrobromide 0.0065 mg. (equivalent to belladonna alkaloids [as bases] 0.1049 mg.) and butabarbital sodium N.F. 16 mg. (Warning: May be habit forming.)

can do more

Contraindications: Anticholinergics should not be used in patients with glaucoma, known prostatic hypertrophy, or pyloric obstruction. Urinary retention may indicate the presence of prostatic hypertrophy. If it occurs, the dose should be reduced or the drug withdrawn. Also contraindicated in patients with known hypersensitivity to one of the components.
Side Effects: Dryness of the mouth, blurred vision, dysuria, skin rash, constipation or drowsiness may occur.

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DATELINE

rees and Shrubs bsorb Noise

Lincoln, Neb. - An attempt to cut traffic noise with trees and shrubs is being tried by University of Nebraska and USDA Forest Service. Program has een under way for one year and has thus far shown optimum noise iltering process occurs only after trees and shrubs have grown con- iderably. Efforts are being made to overcome this time-lapse deficiency hrough use of artificial land-forms to muffle noise as trees mature.

---

ead Poisoning est Developed

Baltimore, Md. - A new testing method for childhood lead poisoning, which is both fast and inexpensive, is being tried by Dr. J. J. Chisolm, associate pro- essor of pediatrics at Johns Hopkins. Test requires only a drop of lood from the fingertip, instead of usual 5 ml from a vein, and result an be obtained in a few minutes. New method can also reveal iron eficiency anemia. Estimated cost per child is $1.00.

---

ational Guard ids Hospital

Tupelo, Miss. - The North Mississippi Medical Center has completed arrangements whereby Mississippi National Guard personnel will assist in ambulance ervice and emergency room duty on weekends. Detachment 1, 123rd edical Company (Air Ambulance) will provide the personnel who will eceive full drill credits while on service with the center. The pro- ram will be initiated with 12 guardsmen participating.

---

arfarin Resistant ats Found

Raleigh, N.C. - Norway rats resistant to Warfarin have been found near here. Local pest control officer found it increasingly difficult to main- ain control over rat population, initially blamed poor technique and aterials, then suspected resistance. In lab studies rats were given -choice, 6-day feeding test with bait containing .025% Warfarin. l N.C. rats survived while rats from Ohio died.

---

ediCall Now Operation

Chicago, Ill. - First nationwide physicians' information service began operation this summer. MediCall was conceived by Dr. J.G. Bellows, Chicago phthalmologist and secretary of American Society of Contemporary edicine and Surgery which now sponsors service. Some 80 specialists ll provide information on a 24-hour basis to doctors in U.S. who lace calls to MediCall headquarters. Number to call is 312-782-7888.

AMA Schedules Congress on Ethics

The Judicial Council of the American Medical Association will sponsor the fourth National Congress on Medical Ethics April 26-28, 1973, at the Washington-Hilton in Washington, D. C.

Speakers and panelists will discuss ethical issues of growing concern to medical professionals and society—from the more traditional such as fee splitting and solicitation—to the more current such as genetic engineering and behavior control.

For further information, write AMA, 535 North Dearborn Street, Chicago, Ill. 60610.

Dr. Levene Heads UAB Eye Institute

Dr. Ralph Z. Levene, formerly of New York University Medical Center, has been named director of research for the Ellen Gregg Ingalls Eye Research Institute; director of residency training, Eye Foundation Hospital; and professor and chairman of the department of ophthalmology, University of Alabama in Birmingham (UAB) School of Medicine. The announcement of the appointment was made jointly by medical dean Clifton K. Meador and J. Craig Smith, chairman of the board of trustees of the Eye Foundation Hospital.

"This appointment marks a new landmark for excellence in eye care for Alabamians," their statement said. "The superb facilities of the Eye Foundation Hospital combined with the academic environment provided by the university will result in a level of patient care, education and research in this field to which we have looked forward for many years."

Dr. Levene, whose offices will be located in the Eye Foundation Hospital, was an associate professor at New York University Medical Center's department of ophthalmology before coming to Birmingham. A native of Canada, he earned his M.D. degree from the University of Manitoba School of Medicine, and also took his internship there. His residency training in ophthalmology was taken at New York University.

Dean Meador explained that all UAB ophthalmology programs will be conducted as joint programs with the Eye Foundation Hospital. Medical students, interns, and ophthalmology residents will rotate through both University Hospital and the Eye Foundation Hospital for their training in eye diseases.

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- high urinary levels
- generally good tolerance
- high solubility at average urinary pH
- rapid absorption
- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

Before prescribing, please consult complete produ information, a summary of which follows:

Indications: Nonobstructed urinary tract infectio (mainly cystitis, pyelitis, pyelonephritis) due to su ceptible organisms. **Important Note:** ***In vitro*** se sitivity tests not always reliable; must be coordinate with bacteriological and clinical response. Ac aminobenzoic acid to follow-up culture media. I creasing frequency of resistant organisms limits us fulness of antibacterial agents, especially in chron and recurrent urinary infections. Maximum safe tot sulfonamide blood level, 20 mg/100 ml; measu levels as variations may occur.

Contraindications: Hypersensitivity to sulfonamide infants less than 2 months of age; pregnancy at ter and during the nursing period.

Warnings: Safety in pregnancy not established. D not use for group A beta-hemolytic streptococcal i fections, as sequelae (rheumatic fever, glomerulon phritis) are not prevented. Deaths reported fro hypersensitivity reactions, agranulocytosis, aplast anemia and other blood dyscrasias. Sore throat, feve pallor, purpura or jaundice may be early indicatior of serious blood disorders. CBC and urinalysis wil careful microscopic examination should be performe frequently.

Precautions: Use cautiously in patients with impaire renal or hepatic function, severe allergy or bronchi asthma. Hemolysis, frequently dose related, may oc cur in glucose-6-phosphate dehydrogenase-deficie patients. Maintain adequate fluid intake to preve crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranuloc tosis, aplastic anemia, thrombocytopenia, leukopeni hemolytic anemia, purpura, hypoprothrombinemia an methemoglobinemia; *Allergic reactions:* Erythem multiforme (Stevens-Johnson syndrome), generalize skin eruptions, epidermal necrolysis, urticaria, serur sickness, pruritus, exfoliative dermatitis, anaphylac toid reactions, periorbital edema, conjunctival an scleral injection, photosensitization, arthralgia and a lergic myocarditis; *Gastrointestinal reactions:* Nausea emesis, abdominal pains, hepatitis, diarrhea, anc rexia, pancreatitis and stomatitis; *C.N.S. reactions* Headache, peripheral neuritis, mental depressior convulsions, ataxia, hallucinations, tinnitus, vertig and insomnia; *Miscellaneous reactions:* Drug feve chills and toxic nephrosis with oliguria and anuria Periarteritis nodosa and L.E. phenomenon have oc curred. Due to certain chemical similarities with som goitrogens, diuretics (acetazolamide, thiazides) an oral hypoglycemic agents, sulfonamides have cause rare instances of goiter production, diuresis and hypo glycemia as well as thyroid malignancies in rats fol lowing long-term administration. Cross-sensitivit with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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2.

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*Koch-Weser, J., *et al., Arch. Intern. Med.*, 128:399, 1971.

For nonobstructed cystitis

begin with

Gantrisin®
sulfisoxazole/Roche®



Usual adult dosage:
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2 to 4 tablets *q.i.d.*

ROCHE

Arthur los



A single-dose, non-staining anthelmi

is pinworms...



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Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion. Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia.

Skin reactions: rashes.

Dosage and Administration. *Children and Adults* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.) maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

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(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml

ORAL SUSPENSION

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
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Lesion #2—Two days after initiation of therapy. Electron micrograph of solar keratotic skin from patient's hand.
Typical abnormalities are:
Malpighian cells [containing an abundance of thick tonofibrils (T)] which are connected with well-developed desmosomes (D). Note the clumped tonofibrils in the so-called 'dyskeratotic' cell (arrow) indicative of solar keratosis. No change can be noted at this level after two days of therapy. × 5000 (12/16/71)



Lesion #3—Two weeks after initiation of therapy. Electron micrograph of skin from patient's hand.
Improvement shown:
Less conspicuous desmosomes (D), widened intercellular spaces and Malpighian cells showing a remarkable reduction of tonofibrils (T). The arrow indicates a degenerating dyskeratotic cell. × 5000 (12/31/71)

Solar, actinic or senile keratoses

By whatever name they may be known, they commonly occur as multiple lesions and chiefly on the exposed portions of the skin. Because they may be premalignant, it is generally agreed that they should be treated. Surgery, cryotherapy, or electrodesiccation may present certain drawbacks, both for the physician and the patient, but there is Efudex® (fluorouracil)—as an alternative to conventional therapy.

Sequence of therapy—Selectivity of response

The easily applied Efudex cream or solution usually begins to show effects within a few days—an erythema in the area of the lesions. Within two weeks after initiation of therapy, this reaction usually reaches its height of unsightliness and discomfort, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

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Treatment with Efudex (fluorouracil) provides highly acceptable cosmetic results posttherapeutically. The incidence of scarring is low.* This is particularly important with multiple facial lesions. Efudex should be applied with care near the nose, eyes and mouth.

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in treating solar keratoses which may be premalignant.



Before treatment—12/14/71



After treatment—Two weeks after therapy stopped—1/28/72

This patient's solar keratoses responded to Efudex (fluorouracil) 5%

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Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable gloved finger. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, trishydroxymethylaminomethane, hydroxypropyl cellulose, parabens, methyl and

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
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ORIGINAL PAPERS

Emergency Room Management of Facial Trauma

J. GEORGE SMITH, M.D.
Jackson, Mississippi

This paper discusses the diagnosis and treatment of facial trauma in the emergency room. The causative factors are briefly enumerated. Soft tissue trauma of the face is discussed with regard to prevention of cosmetic and functional defects. Proper selection of suture material as well as cleansing methods of dirty wounds are described. Specific pitfalls may be encountered with periorbital, intra-oral, and external ear injuries. External skin dressings and subsequent care are briefly outlined. The common types of facial bone fractures are reviewed from the diagnostic viewpoint.

FACIAL AND ORAL injuries are seen with alarming frequeney in most hospital emergeney rooms. Mueh of the inerease can be attributed to the sharp rise in the number of motor vehiele aeeidents. The automobile aeeident victim tends to bend forward, even when seat belts are in use, striking the dashboard or windshield. Other factors eausing injuries are sporting events, home aceidents, eriminal assault, and suicidal attempts.

Facial injuries may frequently be overlooked as many of these patients often have other more life-threatening injuries. This delay in treatment may result in permanent deformities due to malunion of fraetures, wound infection, and excessive sear tissue formation.

The most eommon injury is that of soft tissue trauma. These injuries may be superfieial abrasions, laeerations, evulsions of the lip, nose, and ear, or eomplicated lacerations involving sueh important struetures as the faeial nerve, parotid duet, or lacrimal apparatus. One should never be satisfied with simple sutures of the faee. The first step in eorreet treatment is a thorough exploration of the wound to aseertain its full extent.

Abrasions. Care should be taken to deteet the presence of foreign material, whieh is eommonly found in motor vehicle aecidents, espeeially with motoreyele and seooter aeeidents, when the vietim strikes the road surface or road shoulder.[1] Permanent tatooing can easily result from this type of ground-in dirt and debris. Gentle washing with water usually will remove all debris but on occasion deep debris may require the use of a serub brush, forceps, and general anesthesia.[2] Most abrasions are best treated in this manner and can then be kept moist with A and D ointment or an antibiotie ointment. These raw areas usually heal rapidly and leave minimal residual cosmetie diseolorations.[3]

Lacerations. When these wounds are ragged and irregular one should avoid exeessive soft tissue débridement because it may require flap rotation or skin grafting for closure. Moreover, it is

From the Jackson Ear, Nose and Throat Clinic, Jackson, Miss.
(After Oct. 15, the author will be located at the Ear, Nose and Throat Surgical Group, P.A., Suite 315, 975 Lakeland Drive, Jackson 39216.)

difficult to achieve accurate color match for facial skin. It is often surprising how seemingly avascular skin fragments will heal promptly, thus reducing the need for subsequent revisions of scars. When necessary, skin should be obtained from the postauricular or supraclavicular areas for optimal cosmetic results. The size of the graft can easily be determined by placing gauze over the raw surface and allowing a blood stain to form. This outline is then traced on the proposed donor site. Usually this full thickness graft requires a small stent dressing.

Complex Lacerations. When a *parotid duct* laceration is suspected, gentle probing of the duct will disclose the injury. This is done by passing a probe or small polyethylene tube into the parotid duct orifice located on the buccal mucosa opposite the second upper molar tooth. The diagnosis of parotid duct laceration is obvious when the probe appears in the wound (see Figure 1). In this situation the duct must be closed over a stent of a small polyethylene tube, using 6-0 or 7-0 plain gut suture, with the tube left in for approximately three days.

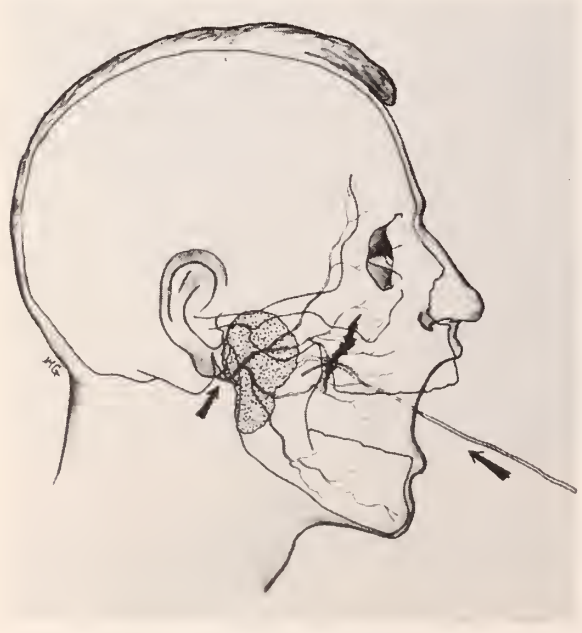


Figure 1. A polyethylene tube extrudes from the parotid duct within the laceration, confirming parotid duct injury (arrow). Attention is called to those areas where facial lacerations may cross the course of the facial nerve (arrow).

Lacerations over the course of the *facial nerve* should not be anesthetized until facial nerve function has been thoroughly evaluated. The examiner should test for function of all facial nerve branches by instructing the patient to close the eyes tightly, wrinkle the forehead, and show the teeth. Upon confirmation of facial nerve paralysis, the wound is examined for the cut or frayed ends of the nerve. These ends must then be trimmed with a sharp knife and resutured, utilizing fine silk of 7-0 or 8-0 caliber. Magnification through the operating microscope is desirable.

Lacerations near the inner portion of the eyelid should be carefully investigated for injury to the *lacrimal apparatus* which would later result in excessive tearing if left unrecognized and unrepaired. Lacerations of the free lid margin must be carefully approximated to avoid an unsightly notching deformity. Since the eyelid has very little subcutaneous fat, any excessive fat in the wound should alert the physician to an injury to the orbital septum with herniation of orbital fat and a possible penetrating injury to the globe. All eyelid lacerations are repaired in three layers. The conjunctival-tarsal layer is closed with a continuous suture of 7-0 chromic catgut, taking care to bury the knot to avoid corneal irritation. The muscle layer is repaired with 5-0 plain absorbable suture and the skin edge with 6-0 nylon or silk.[1]

Lacerations which extend to the periosteum of the facial bones should always be carefully approximated in at least a three layer fashion to avoid scar retraction and a dimpling deformity. This is especially true over the brow, infraorbital rim, and the bridge of the nose. Extensive cleansing should be done to avoid infection when lacerations involve the bulbous tip of the nose. The large number of sebaceous glands over the nose contribute to infection in this area.

Intra-oral Lacerations. According to an old misconception regarding lacerations of the lips and oral cavity, it has been frequently taught and practiced that lacerations of the mouth will become infected if sutured. This is rarely the case due to the unusually rich blood supply and to the fact that the patient is fairly immune to his own oral bacteria. When oral lacerations gape or open with movement of the tissues, surgical closure is indicated.[4] Infiltration with xylocaine (Lidocaine) with adrenalin will significantly reduce the bleeding in most of these lacerations. Due to the tongue's strong musculature, through and through sutures of 3-0 chromic catgut are required. However, in most other oral locations 4-0 chromic catgut is sufficient. Lacerations of the lip involving the vermilion border, especially when these are through and through injuries, require close approximation. Lip repairs should be designed to restore fullness to the lip as well as exact reap-

proximation of the vermilion border. This is best accomplished by placing a deep musculature stitch initially. The first skin suture should be placed at the mucocutaneous (vermilion) border to allow optimum cosmesis (see Figure 2).

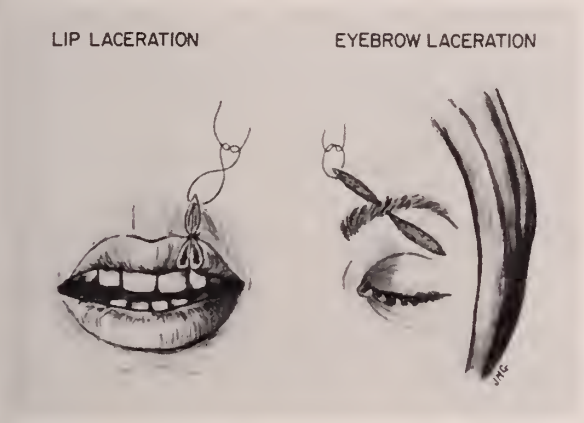


Figure 2. Utilization of obvious landmarks (vermilion border, hairline) is important to attain optimal cosmetic results.

Cartilage Injuries. Another specific soft tissue injury which requires early attention is that of hematoma formation around cartilaginous structures such as the external ear and the nasal septum. Any hematoma formation which elevates the perichondrium from the cartilage often results in cartilage necrosis and with ultimate severe deformities. The "cauliflower ear" and "saddle nose" are classical examples of this problem. It is therefore mandatory to inspect the nasal septum and external ear to ascertain the extent of an injury. A spray of 1 per cent neo-synephrine will shrink the nasal membranes to facilitate a more thorough inspection.[5] When poor lighting exists the otoscope serves as a good source of illumination to inspect the anterior nasal vault. A fresh hematoma can readily be evacuated with a large bore needle and syringe. A firm pressure dressing must then be applied to prevent reformation of the hematoma. The administration of prophylactic antibiotics is indicated in this case.[6] The wound should then be inspected again in 36-48 hours as these extravasations tend to reaccumulate as a seroma.

Sutures. The choice of suture material is of utmost importance. Absorbable 4-0 or 5-0 suture serves best for the initial subcutaneous closures. Failure to reapproximate the subcutaneous tissue before closure of the skin is attempted is probably the most significant and most common error which invariably leads to poor cosmetic results. One cannot emphasize enough the need for multiple layer closures because these alone relieve the tension on the final skin sutures.

Skin sutures over the face should always be 5-0 or 6-0 caliber. Fine silk sutures hold the knot much better with reduced likelihood of tension at the skin line. The advantage of monofilament nylon is its minimal irritation of the skin margins so that these sutures can generally be left in somewhat longer. Silk or nylon are well tolerated but should be removed on the third or fourth day and, rarely, if ever, after a week to 10 days.

Skin surfaces can then be supported with butterfly tapes or paper tapes utilizing benzoin for extra adhesiveness. Telfa or furacin silk serve as good external dressings, but one should be careful to avoid excessive pressure where skin has only a marginal blood supply. Antibiotics are given for all extensive and dirty wounds, but are rarely used on fresh, clean lacerations. The use of edema-reducing medications seems to be a matter of personal preference. We have not found a pressing need for them.

The second common maxillofacial injury is facial bone fracture. Many of these fractures may be very subtle, producing few external changes, while other injuries present gross deformity of the facial skeleton. It is therefore mandatory to conduct a systematic, careful inspection of the facial contours, which is often more revealing than any radiologic projection.

Tri-malar Fracture. Structurally weak areas of the facial skeleton tend to cross suture lines with the result that highly predictable sites of fracture are produced in many cases. This is especially true of the zygoma which typically fractures at three points: the zygomatico-frontal suture line; near the infraorbital foramen; and through the zygomatic arch, hence the frequent designation as "tri-malar fracture." The two zygomatic arches are palpated from the point of origin anterior to the ear to the infraorbital rim. A side to side comparison with gentle pressure will "milk" through the edema and identify the underlying skeletal structures.[7] A step deformity is frequently palpated in this manner along the involved infraorbital rim. Other accompanying findings are usually infraorbital hypesthesia and a flattened zygomatic arch (see Figure 3).

Eye Involvement. A thorough evaluation of the eye should be made to rule out primary injuries to the eye or the possibility of a "blow-out fracture" of the orbital floor. The latter results from the transmission of the impact force via the globe to the orbital floor, thus fracturing it with displacement of orbital contents into the maxillary antrum. A simple test of visual acuity and extra-

ocular movements should be done. Diplopia results from an entrapped inferior rectus muscle causing limitation of ipsilateral upward gaze; with severe "blow-out fractures" the involved eye may appear lower than on the uninjured side. Confirmation can be made by gentle traction on the inferior rectus muscle with small forceps utilizing topical anesthesia or a subconjunctival injection of xylocaine. Inability to rotate the globe upward indicates this muscle entrapment; it is the most commonly overlooked injury from the standpoint of management.

Nasal Fracture. The nasal bone is the most frequently fractured facial bone.[2] Deviation of the external nose, local crepitance, and epistaxis are cardinal signs of an existing nasal fracture. While x-ray examination often confirms a nasal fracture, it can never rule it out. The cartilaginous nasal tip and columella are palpated with the forefinger. A soft dorsum and tip usually indicate injury to the cartilaginous skeleton. When this is left uncorrected, severe deformities result which later will require rhinoplastic surgery for correction of not only the external cosmetic deformity but also the internal functional derangement.

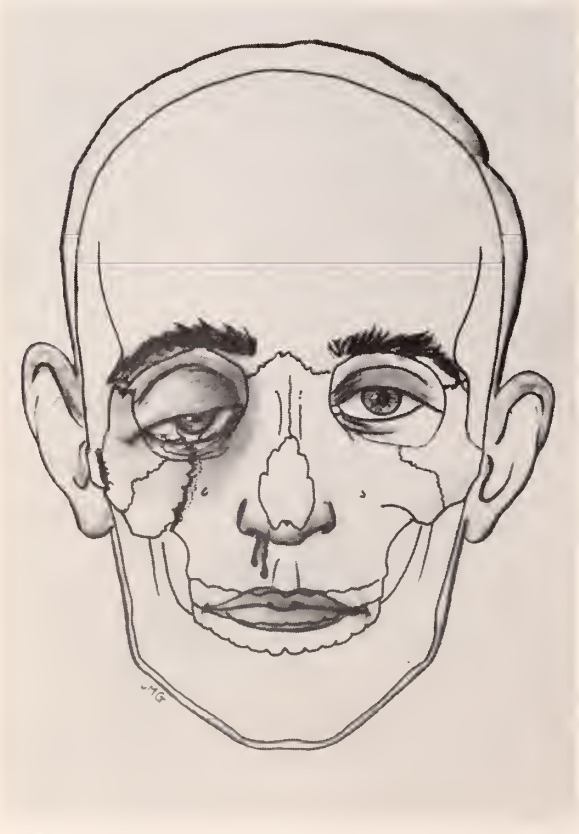


Figure 3. The typical tri-malar fracture is characterized by periorbital edema, lowering of the eye (if combined with a blow-out of the orbital floor), flattening of the facial contours, and unilateral epistaxis.

This injury is particularly significant in young children for two reasons: the diagnosis is difficult to make because the child is often uncooperative; and the nasal bridge is not fully developed. Many otolaryngologists feel that an inadequately treated nasal injury in children is a common cause of internal nasal deformity in later life. Therefore general anesthesia is recommended for examination when any significant nasal trauma is encountered in a young child. As previously stressed, an overlooked nasal septum hematoma may cause severe nasal deformities.

Frontal Bone. Fractures which involve the frontal sinus must be closely evaluated to avoid the formation of mucocele in later years due to inadequate sinus drainage. This is particularly true in case of severe comminution of the frontal sinus walls, which may require surgical obliteration of the sinus. This emergency is best evaluated by lateral skull films which indicate the involvement of the anterior and posterior walls of the two frontal sinuses.

Mid-Face Fractures. Mid-face fractures traditionally have been classified by the type of fracture line through the maxilla and are known as LeFort types I through III. Type I denotes a transverse fracture through the maxilla above the teeth. Type II or pyramidal fractures pass through the nasal bones and frontal processes of the maxilla. Type III denotes complete craniofacial disjunction with several subdistinctions. This classification is rarely useful in the emergency room as most severe mid-face injuries consist of a combination of various fracture lines. We frequently see patients with what would be a LeFort Type II on one side and a LeFort Type III on the other. It probably is best to describe the actual fracture lines rather than to attempt a classification according to a didactic standard.

True mid-face fractures may be seen in many ways. Cerebrospinal fluid *rhinorrhea* may be the first indication of an injury to the cribriform plate. One should be cautious in using nasal packing early in these cases as this may result in retrograde bacterial invasion with meningitis. A mid-face fracture may also present as a "floating maxilla." This diagnosis is easily made by grasping the upper central incisors and feeling the obvious mobility and crepitance of the mid-face skeleton (see Figure 4). A patient of this type may also present acute upper *airway obstruction* due to the posterior dislocation of the maxilla and palate. A tracheotomy may then be needed, par-

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Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B_{12} progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

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ticularly if transportation of the patient is contemplated.

Dental Occlusion. The importance of careful examination of the teeth cannot be overstressed. The presence of teeth may be the only foundation upon which to begin the restoration of form and function to a severely fractured face. Dentures should not be discarded, even when broken, as they may become useful in later stabilization procedures. Most problems of dental occlusion as a result of mandibular or maxillary fractures are readily detected by the patient himself and the complaint of sudden malocclusion is frequently voluntary. Other presenting complaints are local pain, swelling, and trismus. Palpation with the forefinger often detects segmental displacement, alveolar ridge fractures, and loosened teeth. Other frequent findings are an open bite and deviation of the lower jaw to one side (see Figure 4).

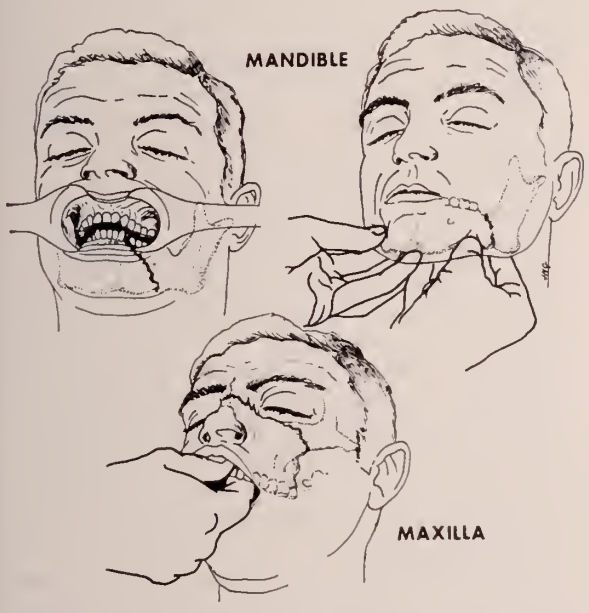


Figure 4. Fractures of the mandible and mid-face skeleton are recognized by intra-oral examination, careful palpation, and demonstration of abnormal mobility (floating maxilla).

Radiologic Study. The basic radiographic examination should include a stereo Waters view, a Towne's view, and mandible films. The Waters view is the best single study for evaluation of the orbital rim and floor, the maxillary sinuses, and the zygomatic arches. It also gives helpful information in evaluation of the nasal bones. Unilateral clouding of the maxillary antrum should raise suspicion of a zygoma-maxilla complex fracture, indicating an accumulation of blood from the fracture through the sinus.

The Towne's projection best demonstrates the condyle and neck of the mandible and the zygomatic arches are also well visualized. The posterior-anterior projection of the mandible is best for a general survey of this bone. It demonstrates well the symphysis, the body, and the rami. These views also give a good estimation of degrees of displacement and rotation of the facial skeleton.

Skull and Spine Injuries. Although not within the scope of this paper, special emphasis must be made whenever dealing with any victim of head and neck trauma. All of these patients must have a simple otoscopic examination of the tympanic membrane to rule out a *basilar skull fracture.* This is easily recognized by dark blue blood behind the membrane. Occasionally, blood may have trickled into the external auditory canal and can be confusing. Such an ear must not be irrigated under any circumstance.

Another pertinent evaluation is that of *cervical spine injury,* which if unrecognized, may be paralytic if not fatal. All patients with significant head and neck injuries should have a cross table lateral view of the cervical spine before movement or transportation is undertaken.

SUMMARY

The extent of facial trauma can be fully and efficiently evaluated by a systematic examination of the facial skeleton and soft tissue. Early recognition and correct treatment of these injuries may prevent permanent deformities as well as functional deficits. This recognition rests primarily with the physician who conducts the initial evaluation and management of the accident victim. ★★★

916 North State Street (39201)

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Disseminated Intravascular Coagulation

WILLIAM B. WILSON, M.D.
Jackson, Mississippi

Patients with various forms of life-threatening disease may suffer sudden loss of hemostatic function, manifested by massive hemorrhagic phenomena and completely incoagulable blood. This catastrophe is uncommon, but unpredictable. If it is recognized and treated promptly, the prognosis is excellent. Otherwise, it is usually fatal.

FOR OVER 100 YEARS, there have appeared in the literature sporadic references to the fulminant collapse of hemostatic function, which sometimes occurs in patients with life-threatening diseases. The most familiar example of this phenomenon is the Waterhouse-Friderichsen syndrome. Obstetricians are familiar with it as the massive bleeding which may occur in association with the obstetrical complications of abruptio placentae, amniotic fluid embolism, septic abortion, puerperal sepsis, or prolonged retention of a dead fetus. Hemolytic transfusion reactions are sometimes manifested, in part, by widespread petechial hemorrhage. Loss of blood coagulability is a recognized complication in surgical patients receiving massive blood transfusions, or undergoing prolonged extracorporeal circulation. Generalized fibrinolysis occasionally develops during surgery for prostatic carcinoma. Gram-negative sepsis sometimes terminates with hemorrhagic manifestations. The conditions in which sudden loss of blood coagulability has been observed form a long list (see Table 1).

In the early 1960's, this catastrophic loss of hemostasis, occurring in a wide variety of clinical settings, began to be recognized by several characteristic abnormalities of the coagulation profile, the most common of which were hypofibrinogenemia and thrombocytopenia, with varying degrees of fibrinolysis often associated. There emerged the concept of diffuse coagulation within the vascular system, resulting in rapid consumption of clotting factors, and secondary activation of the fibrinolytic system.[1-5]

McKay, a pathologist at Columbia University, was one of the early workers to explore the concept of disseminated intravascular coagulation as a basic "intermediary mechanism of disease."[1] Working separately but with full cognizance of McKay's concepts and work, Hardaway, at Walter Reed Hospital, conducted extensive animal experiments attempting to document the causes and pathogenesis of disseminated intravascular coagulation.[2] Both men felt that disseminated intravascular coagulation (DIC) might be an important phenomenon in explaining the pathogenesis of many disease states. Each man explored a wide variety of clinical and experimental situations in an attempt to discover if DIC played a part in their pathogenesis. Hardaway's work, while ranging over a wide variety of situations, suffered considerable lack of precision in experimental design and technique, while McKay attempted to explain probably too many disease states and pathologic findings in terms of DIC. However, the work of both men was instrumental in presenting the concept of DIC to the medical world.

In 1965, Rodriguez-Erdmann, at Boston, introduced the term "consumption coagulopathy."[4] Since about that time the literature on this subject and its acceptance as a basic mechanism of disease have expanded rapidly. The importance of the role of fibrin degradation products ("split products") in the pathologic physiology of DIC was subsequently elucidated in large part by Merskey and Johnson, working independently and together.[3] It became recognized that the experi-

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mental phenomenon known as the "generalized Shwartzman reaction" was a manifestation of severe DIC, and probably represented the most readily reproducible example of the syndrome, as well as having a more-or-less exact clinical counterpart in certain severe cases of DIC. It has recently been suggested[6] that the terms "disseminated intravascular coagulation," "consumption coagulopathy," and "generalized Shwartzman's reaction," be considered as synonymous, describing the clinical condition in which there is depletion of platelets, prothrombin, fibrinogen, and clotting factors V and VIII, regardless of whether or not secondary ("defensive") fibrinolysis occurs. The term "fibrinolysis" should probably be reserved for those unusual situations in which this is thought to be the predominating mechanism, and probably should always be expressed as "primary fibrinolysis" to further emphasize the primary nature of the fibrinolytic process. The terms "defibrination syndrome," "fibrination syndrome," or "hypofibrinogenemia" should probably be abandoned since they are only partially descriptive of the pathologic physiology involved.

PATHOLOGIC FINDINGS

The pathologic findings of DIC, both clinical and experimental, vary considerably in individual patients and individual animals. Even when the clinical and coagulation abnormalities of DIC are fully manifested, there may be no pathological changes demonstrable at all; or fibrin-platelet thrombi may be found in any or all of the organs. Additional pathological findings, if present, reflect the basic process of thrombosis in the microvasculature.

The kidney is the organ most likely to be affected. Changes are also commonly found in the brain, pituitary, lung, liver, adrenal, and gut mucosa.[1, 2, 7] In the kidney there may be focal or diffuse tubular necrosis, which may proceed to classical bilateral renal cortical necrosis. The brain may show perivascular ring hemorrhages, with possible focal infarction. The pituitary may show varying degrees of focal hemorrhage or infarction. The lung may show focal alveolar hemorrhage. The liver may show focal hemorrhage and necrosis, or even extensive necrosis. The adrenals may show focal hemorrhage or necrosis, or diffuse hemorrhagic necrosis (Waterhouse-Friderichsen syndrome). The changes in the gut mucosa may be quite variable and found anywhere from the esophagus to the rectum, consisting of petechiae, ecchymoses ("shock gut"), focal ulcers, large ulcers, or pseudomembranous enterocolitis.[8] It should be noted that these pathological findings, especially when limited, are rather non-specific and are not considered sufficient to establish the diagnosis at autopsy even when microthrombi are present.[6] Rather, most workers consider the diagnosis to depend upon antemortem demonstration of characteristic coagulation alterations, and especially the response to heparin, as will be discussed later.[6]

TABLE 1

CONDITIONS WHICH MAY BE ASSOCIATED WITH DISSEMINATED INTRAVASCULAR COAGULATION[11]

1. Cancer (especially disseminated)
   Lung, breast, stomach, colon, pancreas, prostate and ovary
2. Surgery (usually when prolonged or extensive)
   a. Lungs, stomach, pancreas and prostate
   b. Cardiopulmonary bypass, usually when prolonged
   c. Massive, rapid, transfusions of banked blood
3. Shock
   a. Septic, especially meningococcal and other gram-negative organisms
   b. Hemorrhagic
   c. Anaphylactic
   d. Traumatic
4. Hematologic conditions
   a. Acute leukemia
   b. Reticulum cell sarcoma
   c. Acute hemolysis (spontaneous or transfusion reaction)
5. Obstetrical
   a. Abruptio placentae
   b. Amniotic fluid embolism
   c. Septic abortion and postpartum sepsis
   d. Retention of dead fetus
6. Infections
   a. Sepsis, especially meningococcus and other gram-negative
   b. Purpuric chickenpox, adults and children (purpura fulminans)
   c. Rocky Mountain spotted fever
   d. Malaria, especially falciparum
   e. Viral hemorrhagic fevers (arborviruses)
7. Severe liver disease
8. Extensive burns
9. Heat stroke
10. Drug reactions
11. Snake bite
12. Giant hemangioma
13. High-molecular-weight Dextran
14. Possible causes (debatable)
    a. Hemolytic uremic syndrome
    b. Thrombotic thrombocytopenic purpura
    c. Collagen diseases
    d. Fulminant glomerulonephritis

Bachmann[9, 10] believes that DIC begins with the common denominator of hypercoagulability

of the blood, which may be brought about by a number of mechanisms: (a) release of tissue thromboplastin or thromboplastin-type substances into the circulation; (b) activation of the intrinsic coagulation pathway by Hageman factor (contact with foreign surfaces; e.g., extraendothelial tissues, extracorporeal circulation); (c) failure of hepatic clearing of activated clotting factors: (d) blockade of the reticuloendothelial mechanism for clearing particulate and macromolecular substances; (e) lack of normal coagulation inhibitors; (f) significant stagnation of the capillary blood flow. There is considerable experimental evidence to support the importance of each of these mechanisms in precipitating DIC.

Even when the above factors are present, it should be emphasized that the DIC syndrome may vary considerably in clinical severity. There may be only a state of mild hypercoagulability, manifested by shortened clotting time and partial thromboplastin time; this may progress to "smoldering" DIC, in which the clotting time and PTT are shortened, but with the additional findings of fibrin split products in the blood, and possibly compensatory elevation of fibrinogen and clotting factors. These compensatory elevations may confuse the diagnosis.

ACUTE DIC

The next most severe stage is termed "acute or chronic uncomplicated" DIC, in which the clotting time and PTT return to normal or begin to be prolonged, the prothrombin time becomes prolonged, there is a reduction of platelets, fibrinogen, and assayed clotting factors, the titer of fibrin split products rises, and there may be some evidence of demonstrable fibrinolytic activity.

The most severe stage is termed "complicated" DIC, which is often irreversible, and usually associated with shock and clinical hemorrhage, and with severe derangement of the entire clotting mechanism, clinically and by all laboratory parameters. In these two latter situations, it is assumed that fibrin is being actively deposited in the microvasculature, and a vicious cycle is getting underway (decompensation). The kallikrein system is activated, with kinin release, causing splanchnic dilatation, increasing capillary permeability, and probably resulting in accelerated activation of Hageman factor. Coagulation factors are being rapidly consumed. The fibrinolytic system is being activated, with the production of fibrin split products, which are actively anticoagulant, as will be described below. Capillary blood flow may be slowed, hepatic-clearing mechanisms may be hampered, and reticuloendothelial-clearing mechanisms may be blocked.

As can be readily appreciated, active DIC brings into play most or all of Bachmann's six factors listed above, and a vicious cycle is established. The key role in determining the outcome of the process at this stage lies with the fibrinolytic system, or more specifically, the interplay between plasmin (the fibrinolytic enzyme) and thrombin (the procoagulative enzyme), fibrinogen, and the degradation products of fibrinogen ("split products"). Recent developments in understanding this interplay have been very clearly described by Deykin.[11] Fibrinogen is a long molecule, consisting of three pairs of chains, alpha, beta and gamma. Thrombin cleaves the alpha and beta chains, leaving the paired gamma chains which are called fibrin monomer. These rapidly polymerize with themselves into a macromolecular gel of loosely structured fibrin, upon which factor XIII (fibrin stabilizing factor) acts, converting it into tightly structured fibrin. A portion of Figure 1 depicts this process, which represents Stage III of the normal coagulation process.

Besides cleaving fibrinogen and permitting the polymerization of fibrin monomer, thrombin has other important procoagulative effects. It acts directly to aggregate platelets, which become fused into an amorphous mass. It also enhances the clotting cascade in Stage I (activation of Factor X), and in Stage II (conversion of prothrombin into thrombin), (autocatalytic effect). Finally, thrombin can directly convert plasminogen into plasmin, the active fibrinolytic enzyme, therefore serving to terminate both its own generation and the clotting process under normal circumstances.

The evolution of thrombin is also limited under normal circumstances by other mechanisms; namely, removal by the liver of tissue thromboplastin and certain activated Stage I factors; self-limitation of each Stage I factor as it is activated; and rapid dilution of activated clotting intermediates by normal blood flow. It can be readily appreciated, therefore, that the normal limitations of thrombin generation can be undermined by many of Bachmann's above-listed factors which lead to hypercoagulability and DIC. The relative importance of these individual mechanisms in achieving physiologic control of thrombin generation is undetermined. However, it is known that during the normal hemostatic process two important additional mechanisms come into play, by which thrombin is neutralized: its rapid adsorption onto the developing fibrin gel, and neutraliza-

tion by a more slowly acting substance, termed Antithrombin III. Finally, the most important system limiting the unimpeded generation of thrombin is the fibrinolytic system, which is activated in part by thrombin itself.

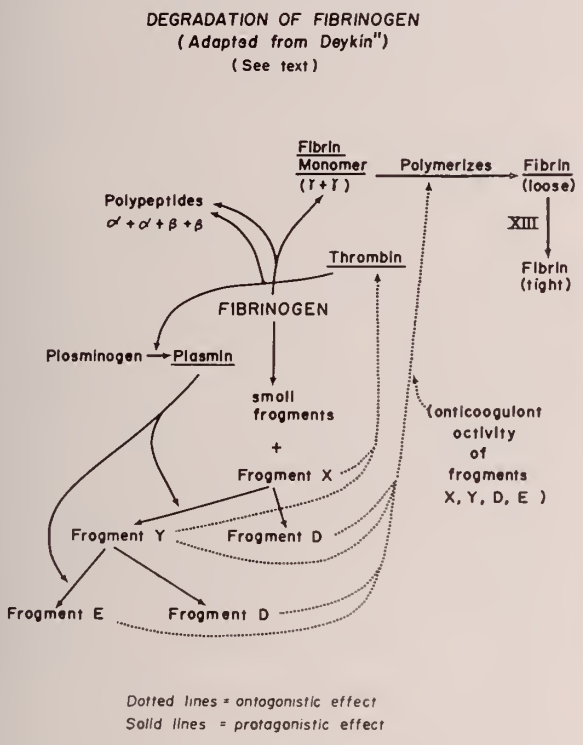


Figure 1

The fibrinolytic system consists of circulating plasminogen, which is activated into plasmin, a potent, non-specific, proteolytic enzyme. As depicted in Figure 1, plasmin initially cleaves fibrinogen into a large fragment, termed X, and several smaller fragments. It then cleaves X into fragments Y and D. Y is cleaved into fragments E and another fragment D. Fragments X and Y are capable of clotting at a reduced rate, thereby consuming thrombin and inhibiting its further action. Fragments D and E are not clottable, but they, as well as fragments X and Y, exert anticoagulant activity by interfering with proper polymerization of fibrin monomer.

In summary, when fibrinogen is converted into fibrin, the process is terminated in an orderly fashion by the removal of the converting enzyme thrombin, through adsorption and competitive inhibition, destruction of any remaining fibrinogen by the activated plasmin system, and interference with further polymerization of fibrin monomer by the resulting degradation products of fibrinogen. Washing out of the activated factors by normal blood flow, and their eventual clearance by the liver and reticuloendothelial system, serve to bring the episode of hemostasis to an end.

In DIC, activated Stages I and II result in thrombin formation, which is balanced by activation by the fibrinolytic system with plasmin formation. As long as both these systems are being continually activated, the syndrome may be said to be proceeding. If hepatic and reticuloendothelial clearance is adequate, further derangement of the clotting system may be prevented. However, it is thought that activated Hageman factor may play an important role in further deterioration of the clotting system in that it serves both to activate the plasminogen system and also to activate the kallikrein system with elaboration of bradykinin, a potent vasodepressor, which dilates the splanchnic bed and profoundly impairs liver blood flow, resulting in decreased clearance of activated clotting factors. The balancing effect of activated thrombin generation and activated plasmin may be considered a state of compensation, with decompensation probably resulting if hepatic and reticuloendothelial clearance mechanisms fail through inadequate blood flow (as in shock). This concept may also explain the paucity of demonstrable fibrin thrombi in the microvasculature at autopsy, and even greater rarity of frank microinfarction, since fibrin is rapidly consumed rather than actually deposited, resulting only in a terminal total failure of hemostatic function.

DIAGNOSIS

DIC usually occurs in association with one of a number of fairly well defined clinical settings (see Table 1). The "complicated" or decompensated form is probably most commonly encountered in obstetrical disasters. When associated with surgery, DIC is usually manifested by uncontrollable bleeding which becomes evident during an operation, or shortly postoperatively. DIC is probably fairly commonly associated with disseminated malignancy, but usually is subclinical, manifested only by incidental laboratory abnormalities which do not necessitate treatment. In the severe or decompensated form, symptoms are dramatic, and may include any or all of the following: severe pain in the muscles, back, and abdomen; cutaneous petechiae; nausea and vomiting; dyspnea and cyanosis; gastrointestinal bleeding; convulsions, coma, shock, and oliguria.[7] All degrees of variability from the subclinical to the decompensated ("complicated") forms may be encountered.

The laboratory diagnosis hinges largely on demonstration of the characteristic coagulation changes, especially depletion of platelets and fi-

brinogen, coupled with a clinical and coagulative response to heparin which is considered the single most diagnostic finding.[6] In fulminant DIC, there is always a marked decrease of platelets, fibrinogen, and almost all clotting factors.

However, the findings may be quite variable, especially in subclinical DIC. This variability in laboratory findings depends, in part, on the type of assay used, since one-stage assays generally measure activated factors, whereas two-stage assays generally measure the unactivated forms. Depending upon the progress of the on-going DIC, varying amounts of activated and unactivated factors are present in the blood at any given time. Early in the process when there is activation, but not depletion, of the clotting factors, one-stage assays show high levels, whereas two-stage assays may not be diagnostic; unpredictably, the reverse may be true, since in the early stages there tends to be rebound over-production of the more labile clotting factors, especially Factor VIII.

In decompensated DIC, all factors are generally depressed, but in compensated DIC Factors VIII, IX, XI, and XII show a wide spectrum of activity. The diagnostic dilemma is generally resolved, however, in clinically significant DIC, since fibrinogen is invariably attacked both by thrombin and plasmin, and therefore its concentration is almost invariably diminished, whether measured chemically or by thrombin-time assay. Likewise, thrombocytopenia is almost uniformly present in clinically significant DIC, and may be relied upon heavily for diagnosis.[11]

Obviously, the demonstration of fibrin split products represents the hallmark of DIC, in view of the pathophysiologic considerations outlined above. Their titer is a function of both the extent of the thrombotic process, and the activity of the fibrinolytic component. In all cases of compensated or decompensated DIC, split products are demonstrable in the blood, but usually in fairly low titers. High titers of split products indicate very active fibrinolysis. It is generally agreed that "primary fibrinolysis" occurs almost exclusively during surgery for carcinoma of the prostate, and possibly during pneumonectomy. This has important implications regarding treatment, to be discussed below. Separation of primary fibrinolysis from DIC may also be facilitated by examining the blood smear, which may show a picture of microangiopathic hemolytic anemia in DIC, due to the trauma suffered by the erythrocytes passing through fibrin-clogged capillaries, whereas such a picture would not be expected in primary fibrinolysis. In summary, the more common coagulation tests, such as bleeding time, clotting time, prothrombin time and partial thromboplastin time, give highly variable results in DIC, largely depending upon the stage of the syndrome; and highly sophisticated analyses of individual clotting factors, likewise, give unpredictable results of little clinical value; whereas, fibrinogen depletion and platelet depression, which are both easily determined in almost all laboratories, are fairly constant findings in almost all cases of clinically significant DIC, even if not fulminant.

It should be noted that the platelet depression in DIC is usually not marked, generally being in the range of 50 to 100,000, and the fibrinogen level may be depressed only to the low-normal range or slightly subnormal range, even when DIC is proceeding rapidly. Therefore, borderline findings in these two parameters should be given considerable diagnostic weight if the clinical setting suggests DIC. In the absence of at least some depression of fibrinogen and platelet levels, the diagnosis of DIC probably should not be made.[11] However, it should be emphasized that *sudden, obvious loss of hemostatic function, in the proper clinical setting, is strongly suggestive of DIC.*

LABORATORY METHODS

Most of the laboratory tests required for the diagnosis of DIC are done by well-established methods, which require no comment. However, several different methods, employing different principles, are utilized for the detection of fibrin split products with the obvious implication that no method is superior to the others. In order to reliably demonstrate split products, the handling of the blood sample is of paramount importance.[11] Whole blood must be treated with an excess of thrombin, which will clot all fibrinogen and clottable large split products (X and Y), leaving the small unclottable split products. A plasmin inhibitor (EACA) must also be immediately added to protect the small split products from further degradation, which otherwise would proceed unchecked after venipuncture. With fibrinogen and its large clottable fragments removed, the split products may be detected with antifibrinogen antiserum since they retain specific antigenicity despite their fragmentation. One of the simplest and most reliable of these methods is the commercially available "Fi test," in which latex particles, coated with antifibrinogen antiserum, are permitted to react with the patient's serum treated in the manner described above. The split products retain enough antigenicity to cause clumping of the coated latex particles, and serial dilution

of the patient's serum permits titration of the split products. This test is probably about as good as any.[11]

Other tests utilizing immunologic principles include immunodiffusion, with or without electrophoresis, tanned-red-cell agglutination techniques, and cryoprecipitation of split products. Certain strains of coagulase-positive staphylococci clump in the presence of fibrin monomer and large fragments, permitting their use as a detection device. Fibrin monomer and large fragments can be caused to polymerize by cryoprecipitation, ethanol gelation, or precipitation with protamine sulfate, and their concentration measured turbidimetrically. These tests, which have been referred to as "paracoagulation tests," have low specificity and a high incidence of false positive reactions,[11] although a recently reported study using certain modifications of protamine precipitation claims greater specificity.[12] Another recent, careful study[13] reported good correlation between the staphylococcal clumping methods, hemagglutination-inhibition, and latex agglutination methods, all of which were equally sensitive, while the immunodiffusion test seems to be less sensitive. It appears that the Fi test, on the properly treated patient's blood, as described above, is the easiest, quickest, and most reliable method for detecting split products.[11]

TREATMENT

Obviously, the initial step in treatment of all cases of DIC, whether mild or severe, would consist of removing the stimulus, if this is possible. In obstetrical conditions, the uterus may be emptied, or if necessary, removed. The stimulus is not as easily removed in most other conditions associated with DIC, but many of them, of course, may be amenable to specific therapies. Subclinical and smoldering DIC require no treatment, but the patient should be monitored for possible progression of the process. It is generally conceded that surgery is quite hazardous even in mild DIC.[11]

When specific therapy of DIC itself appears necessary, it should always be directed primarily at the intravascular coagulation, and rarely at the fibrinolytic component.[11] This, of course, would consist of heparin therapy, which can be easily instituted, monitored, and reversed if necessary. Administration of epsilon aminocaproic acid (EACA) is rarely indicated and should be reserved for cases of primary fibrinolysis due to surgery in prostatic carcinoma, since in DIC it may destroy the balance between thrombin generation and plasmin generation by eliminating the latter, and therefore leading to fulminating fibrin deposition. In truly decompensated cases of DIC with widespread clinical hemorrhage, it is necessary to add fibrinogen or fresh plasma to the therapeutic regimen of intravenous heparin; however, fibrinogen probably should not be used before heparin has been tried.[9, 11] While fibrinogen administration could theoretically "feed the fire" of DIC, experience has shown that this does not occur clinically. When DIC appears in heparinized patients (e.g., during cardiopulmonary-bypass surgery), fibrinogen is the agent of choice, after reversing heparinization with protamine. It should be remembered that the incidence of serum hepatitis following fibrinogen administration is quite high. Warfarin has no place in the treatment of DIC.[11]

Numerous reports are appearing almost daily in the literature on the use of heparin in DIC, generally with varying degrees of success. In purpuric chickenpox in both children and adults (purpura fulminans) and in the various hemorrhagic fevers due to arborviruses, heparin has been used with success.[7] It was of apparent benefit in an outbreak of meningococcemia in an army camp in which six patients had well-documented DIC. The first three died, but the second three, treated with heparin and Dextran, survived.[14] On the other hand, 25 children with septic shock and hematologic evidence of DIC were treated with heparin in addition to standard therapy, but the mortality was 58 per cent, about what would be expected in the absence of heparin treatment.[15] However, additional measures to support the blood volume might have improved the survival.

The importance of supporting the blood volume was emphasized in a recent report of 17 cases of abruptio placentae,[16] in which five showed subclinical DIC and five showed decompensated DIC. All of these responded to simple evacuation of the uterus, with correction of hypovolemia, as necessary, by blood transfusion, and in no case was heparin therapy necessary. These authors would have used heparin in preference to the more traditional fibrinogen, if specific treatment of the DIC had been needed. Another recent report[17] describes four patients in fulminant hepatic failure, with clinical and coagulation evidence of DIC, who were treated successfully with heparin and fresh frozen plasma. However, none of these patients would have been classified as uncompensated DIC, judging from the coagulation data, in spite of the hepatic failure, emphasizing the importance of hypovolemia and blood flow stagnation in the decompensation of DIC, rather than liver failure alone.

In summary, the occurrence and pathogenesis of DIC appears to be well established and the clinical settings in which it occurs well documented. The pathologic physiology has apparently been well elucidated, permitting reasonably easy and accurate laboratory diagnosis, and rational and often successful treatment. Additional experience will probably lead to more definitive indications for treatment and more rational supportive measures. One of these appears to be maintenance of blood volume through transfusions or Dextran in all cases of shock, rather than infusion of vasoconstrictive agents which maintain measurable arterial blood pressure but reduce blood flow in the microvasculature. ★★★

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Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
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and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility – and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a great deal of money. I wish we could agree on a "grandfather clause" approach to preparations that have been in use for a number of years and that have an apparently satisfactory track record.

For example, I think some of the antibiotic combinations that were taken off the market by the FDA performed quite well. I am thinking particularly of penicillin - streptomycin combinations that patients—especially surgical patients—were given in one injection. This made for less discomfort for the patient, less demand on nurses' time, and fewer opportunities for dosage errors. To take such a preparation off the market doesn't seem to be good medicine, unless actual usage showed a great deal of harm from the injection (rather than the proper use) of the combination.

The point that should be emphasized is that there are both rational and irrational combinations. The real question is, who should determine which is which? Obviously, the FDA must play a major role in making this determination. In fact, I don't think it can avoid taking the ultimate responsibility, but it should enlist the help of outside physicians and experts in assessing the evidence and in making the ultimate decision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories



If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" decries the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the *usual* dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

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Relative Efficacy

When the Government Decides What Drug Should Be Prescribed, Is the Patient Better Served?

IN THE FALL of 1971, several officials of the Food and Drug Administration began stating that drug manufacturers should provide information on the comparative usefulness of their medications in the treatment of specific conditions. Such "relative efficacy" data, they said, should be made part of the prescribing information supplied to physicians in drug product labeling.

To persons familiar with the history of the Food, Drug, and Cosmetic Act, the statements from FDA were far from novel. Indeed, the matter had been thoroughly discussed a decade before when Congress was in the process of enacting the 1962 amendments to the act.

At that time, Secretary of Health, Education, and Welfare, Abraham Ribicoff, stated unequivocally that those who had expressed concern that the new law might be used to permit the federal government to make relative efficacy judgments had "no basis for such apprehensions." The proposed amendments, he stressed, "would merely require a showing that the new drug described in the application is safe for use and is effective in use, under conditions prescribed, recommended or suggested, in the labeling thereof. This would not require a showing of relatively greater efficacy than that of other drugs. It would merely require that a drug claimed to be effective for a particular purpose had been demonstrated by sound scientific procedures to be effective for that purpose. In short, it must live up to the claims made for it."[1]

When asked specifically if FDA wanted the power to decide relative efficacy, Secretary Ribicoff answered, "We do not seek it. We do not want it. And my testimony indicated we do not intend to pass on it. . . . We do not want to pass on relative efficacy. We do not want to say that drug A is better than drug B or B is greater than C. We are not looking for that at all, and we do not think it is necessary."

Colorado Senator John A. Carroll pursued the matter still further, noting: "you know, some of the doctors have testified that they themselves do not know what drugs operate differently on different people." Mr. Ribicoff agreed, "Absolutely correct . . . we would not and do not intend and do not want to pass on relative efficacy. This is no power we seek and no power we desire."[2]

This paper was submitted by C. Joseph Stetler, president of the Pharmaceutical Manufacturers Association, and Editor W. M. Dabney felt every member should be informed of its contents. The PMA, writes Stetler, is concerned about regulatory moves by FDA to determine and identify the relative efficacy of drugs and this manuscript was prepared to give some background information and tries to show why PMA thinks the concept is undesirable, not only for physicians and pharmaceutical manufacturers, but for patients as well. He invites individual physicians to submit their comments or examples of how such a government policy could affect their practice.

It would be difficult to express a more clearcut denial of any intention to act to determine relative efficacy than that of the former HEW secretary.

Yet it appears that a change in the department's stated position is intended by some at FDA, apparently on the unsupportable grounds that drug labeling, which does not indicate the product's relative position on a therapeutic scale, is not fully informative, or is somehow false or misleading.

In order to follow that reasoning, one must assume that a prescribing priority system can be clearly established, and, if so, that the federal government should be the judging agency. And that is the crux of the matter.

From the Pharmaceutical Manufacturers Association, Washington, D. C.

RELATIVE EFFICACY / PMA

The question of whether relative efficacy *should* be judged by the government is preceded by the question of whether it *can* be accurately determined. For some drugs, a consensus of expert opinion has been reached. In these cases, the less desirable drug has either vanished (bromides for anxiety, mercurials for diuresis), or has shrunk to prescribing levels justified by the advantages it retains (veratrum for hypertension, sulfonamides for infection). Results of this sort do not require government intervention. On the contrary, it may well be that attempts to impose consensus by fiat rather than by scientific and professional interaction would have had a counterproductive effect.

That leaves many areas of therapy and many groups of drugs for which a consensus has not been reached. Can the government line up, for example, all of the drugs in use against high blood pressure, and meaningfully arrange them in order of efficacy? If so, the physician's task could be simplified immensely. But the answer to this question is *no*.

CONTROLLED STUDIES

A number of controlled studies have failed to show any significant difference in efficacy between the major antihypertensive drugs.[3] Yet, while the experts in the field and the prescribing physicians may be at odds, not one seems to claim that the major antihypertensive drugs now available are indistinguishable with respect to efficacy or usefulness.

While informed experts decline to make arbitrary judgments about the order in which particular drug products should be used, legislation is now pending (S. 2812, 92nd Congress) that would prevent the marketing of any drug not proven to be better than those already available. Had this bill been in effect when the first thiazide diuretics reached the market, it seems likely that only a handful would be available. Researchers, encouraged to proceed even if their discoveries were only modest, found more than a dozen such products, offering the physician a broad range of activity to meet his patient's needs. And, the availability of these alternatives has doubtless been a factor in the reduction—by about 15 per cent at wholesale—in the price of the average diuretic. It is thus impossible to justify the relative efficacy requirement from an economic point of view, let alone a medical one.

Still, some FDA employees are ready to decide such issues. According to the *Washington Post* of Oct. 24, 1971, "some [FDA] scientists say that the diuretic market is saturated. 'We need another diuretic like a hole in the head' one FDA scientist said."

The question asks itself: Do the American people want FDA deciding when the last diuretic has been discovered, or instead do they wish to see further research leading to improved diuretics encouraged? In this connection, it is noteworthy that early tests of a drug often fail to uncover some of its best advantages. For example: The early research on dimenhydrinate was directed toward its antihistaminic properties; only late in the program was another of its characteristics—its usefulness against motion sickness—noticed; the first research using the phenothiazines was in sedation—the drugs' cardinal value in psychoses came to clinicians' attention later; again, the value of isoproterenol in shock, of mafenide acetate in burns, and of lidocaine in cardiac arrhythmia, were not recognized for years after their widespread use for other, less important medical indications.

Had FDA taken the shortsighted position then that one or two good drugs for each therapeutic need should suffice, the drugs just mentioned might never have been marketed. FDA could have said, in each case, that still another antihistamine, another sedative, one more cardiac stimulant, yet another topical antibacterial, and another local anesthetic—was not needed.

Because FDA did not make such arguments when these drugs were before them for approval, hundreds of thousands of patients have benefited enormously, in many cases to the extent of recovering the chance to live.

Similarly, there is a difference of medical opinion on the value of antihistamines, corticosteroids and sympathomimetic agents against allergy, with no clearcut consensus on the issue. A lack of unanimity also exists with respect to the therapy of peptic ulcer, where anticholinergics and antacids are used, and in various musculoskeletal conditions, where some advocate muscle relaxants and others order only phenobarbital. Much depends on the particular patient.

In such cases, FDA traditionally has followed the lawfully required and prudent course of letting the relative merits of the drug be found through experience, once the general questions of safety and efficacy have been answered. The National Academy of Sciences/National Research Council's 1969 Drug Efficacy Study commented on the point:

> "The final arbiter of the value of a drug is the consensus of the experience of critical physi-

cians in its use in the practice of medicine over a period of years. Approval of a new drug for release to the market is only a license to seek this experience."

That process has been responsible for the large array of steroids of value in contraception, for example, and for the development of new drugs for the management of gout and diabetes. In each of these areas, seemingly trivial differences in the drug not infrequently make major differences to patients—and make arbitrary relative efficacy judgments impossible.

Even in the case of the antibiotics, where it is often assumed that it is easy to match the medication against the disease, it is not uncommon to find authoritative disagreements as to the drugs of first choice (or second and third for that matter). For example, one well-known medical guide[4] suggests that the drug of first choice in the treatment of acute gonococcal infections is procaine penicillin G, and that a tetracycline or erythromycin may be used as alternatives; a second and equally respected book[5] mentions no alternatives; a third[6] lists erythromycin ahead of tetracycline, and adds a cephalosporin to the list for the physician to consider; still another book[7] does not list any of the alternates listed in *The Medical Letter Reference Handbook* and the *Merck Manual,* but adds six separate penicillinase-resistant penicillins, and (any) sulfonamide. None of the reference guides mentions spectinomycin, a relatively new (1971) antibiotic that has been the subject of numerous favorable reports. Clearly, there is no unanimity as to the precise ranking of the alternates to penicillin G in treating gonococcal infections; indeed, there is no agreement as to what the alternatives are.

PATIENT REACTIONS

It must be borne in mind that the physician is not only dealing with a disease, which may follow a varied course, but also with an individual patient whose reactions to the drugs prescribed may be crucial to the outcome of the therapy. Because the individual patient's reactions can make it dangerous to give him what for most patients is the "drug of choice," the physician must be permitted freedom to use his own judgment.

Recognizing the importance of allowing the doctors' judgment to prevail, Cornell University's Dr. Peter Dineen, in his chapter on antibacterial drugs in the 1970-71 *Drugs of Choice* wrote:

> "Clinical knowledge is often the method used in selecting a drug, and it may be the best. Properly applied, it combines a knowledge of experimental and clinical evidence of the efficacy of various drugs with personal clinical experience. Once the infecting organism is identified, a reasonable selection of drugs can be made based on experience and knowledge."

Dr. Louis Weinstein of Tufts, in his chapter on the chemotherapy of microbial diseases in the Goodman and Gilman text, put it another way:

> "Presentation of choices of specific agents for the treatment of various infections is always provocative of discussion and disagreement because such choices often represent the distillate of personal experiences that may not duplicate those of others. . . . To complicate matters, sensitivity patterns of a number of microorganisms often vary with the hospital or clinic in which they are isolated. . . . The material presented in this table represents the practice of the author based on his experience with the management of these infections. It is not intended to suggest that the indicated choices are necessarily those of other physicians or that the order is absolute. . . ."

And, Dr. Louis Lasagna, head of the University of Rochester Medical School's department of pharmacology and toxicology, has observed:

> "Progress could be defined as discovering truths that are unrecognized or unaccepted by the experts. As someone who has been dubbed an expert by others, and who rather enjoys the privileges that go with that label, I am not suggesting that expertise has no utility in this world. But the experts can err—witness the thromboembolic hazards of the Pill, or the clinical reports (so long derided) on the antidepressant properties of phenothiazines, or the growing body of knowledge that USP standards (concocted by experts) are inadequate. (And, what is more, the experts often disagree among themselves—if you doubt this, poll any group of experts on the antibiotics of choice to be used in treating septicemia of unknown origin.)" (*Clinical Pharmacology and Therapeutics* 11:3, p. 443.)

If there is a difference of expert opinion and a need for flexibility in the selection of antibiotics, that need is doubly evident in the selection of many other modes of therapy, where the causative agent or factors may well be less clearly understood, and the characteristics that distinguish one useful drug from another may be considerably less discreet. In the treatment of psychotic disorders, for example, it is widely acknowledged that the relative value of one major tranquilizer

as against the others cannot be determined in advance, even though these agents have been under careful and aggressive study for more than 20 years.

Again, the choice of digitalis preparations still presents a challenge, although physicians have studied the use of various forms of these cardiac drugs for about three millennia. Still, according to digitalis authorities Drs. Gordon K. Moe and Alfred E. Farah in Goodman and Gilman (p. 700), "What really matters is not so much the choice or purity of preparations, but the wisdom with which the drug is used by the physician."

Recent research in pharmacology indicates that there may well be a sound scientific foundation for recognizing the full importance of the use of skillful case-by-case judgment that cannot be performed by experts or authorities absent from the patient-doctor transaction.

THERAPEUTIC RELATIONSHIP

The four main factors in a therapeutic relationship are: (1) physician prescribes (2) drug against (3) disease of (4) the patient. The notion of relative efficacy assumes that for a given disease (factor 3), drugs can be ranked independent of physician (factor 1) and patient (factor 4). This assumption is false. Recent discoveries suggest that the individuality of the patient, and of the physician, play very important roles in determining the effectiveness of drug treatment.

One review[8] read:

> "Although it has been recognized for many years that patient-environmental variation is important in determining drug effects, only recently has it been appreciated that genetic factors may play a large part in subtle drug-patient variation. Not all drug-patient variations can be ascribed to genetic factors, but the increasing use of metabolic blocking drugs and enzyme inducing drugs has heightened the clinical awareness of possible subtle pharmacogenic problems."

In the area of mental illness, at least, there are increasing suggestions that the importance and effectiveness of drug therapy vary markedly depending, in part, upon the therapist's experience, values, and personality.[9]

Dr. Louis Lasagna discussed the value of relative efficacy information during a January 1972 conference at the University of Rochester. "To be against information on relative efficacy," he said, "is to be against apple pie, mother love, and the American Flag. It turns out, however, that relative efficacy is very difficult to assess. . . . How nice it would be to have controlled trials data on all those drugs in patients who have, for example, angina, coronary heart failure, hypertension, melancholia and asthma—but the mind boggles as you think about doing these trials."

Supposing, for example, that a new antithyroid drug were marketed, Dr. Lasagna posited that "You might say, 'Well, shouldn't the doctor know how this drug fits in, in terms of relative efficacy, relative toxicity, with other drugs, radioactivity, surgery—a few of the major modalities available for treating hyperthyroidism?' It would be nice again indeed; but again, the prospects of coming up with controlled trials comparing all of those simultaneously is pretty remote."

Moreover, there is a real question as to whether the cost of designing meaningful, definitive studies would be even remotely justified by the patient benefits to be expected. In most therapeutic classes, the number of distinct drug entities of value in treating a particular condition is small, frequently less than a dozen. Broadly speaking, the pharmacological effects of the group can usually be described, as is done in any of the standard texts of therapeutics. Using this information, and adding his own background and experience, the physician chooses one compound, basing his choice on the particular therapeutic (or economic) qualities it offers his patient.

Rather than expend limited clinical research resources testing one well-known drug against another, the prudent use of those resources clearly lies in the development of entirely new compounds.

Meanwhile, information on the relative place of marketed drugs, weighing their therapeutic indexes against alternate therapy, is being collected and published in the usual ways. Better data on the overall ratio of desired effects to unwanted ones, which characterizes a given group of compounds when used in a particular situation, assists the physician, not merely in choosing a given drug, but also in selecting from alternative classes of compounds of possible value to the patient.

The provision, by their peers, of information for physicians' guidance is, of course, a far different thing than the provision of even the same information by the federal government, whose "guidelines" more often than not carry the force of law. The question naturally arises: What does it mean when the government—as distinguished from a private body or expert—asserts that Drug A is the one of first choice in Condition A? What is the physician's legal position if, on the basis of

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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance); diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis and xanthopsia have occurred with thiazide therapy.

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The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four months. Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.
Indicates estrogen excess.
1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen**®).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.
Indicates androgenic excess or estrogen deficiency (fertility is suspect).
1st choice: An estrogen-dominant O.C. (such as **Enovid-E**®).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.
Indicates probable buildup of progestogen-related side effects.
1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen**®).

ge 21, short, mammose, with ormal menses, some acne. Was put n prenuptial regimen of 50-mcg.-strogen/moderate-progestogen .C. for two months. Now has ıcreased acne
Indicates metabolic production f androgen or relative estrogen eficiency.
1st choice: Switch to a 100-mcg.-strogen combination (such as **novid-E**® or a sequential).



Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough...or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

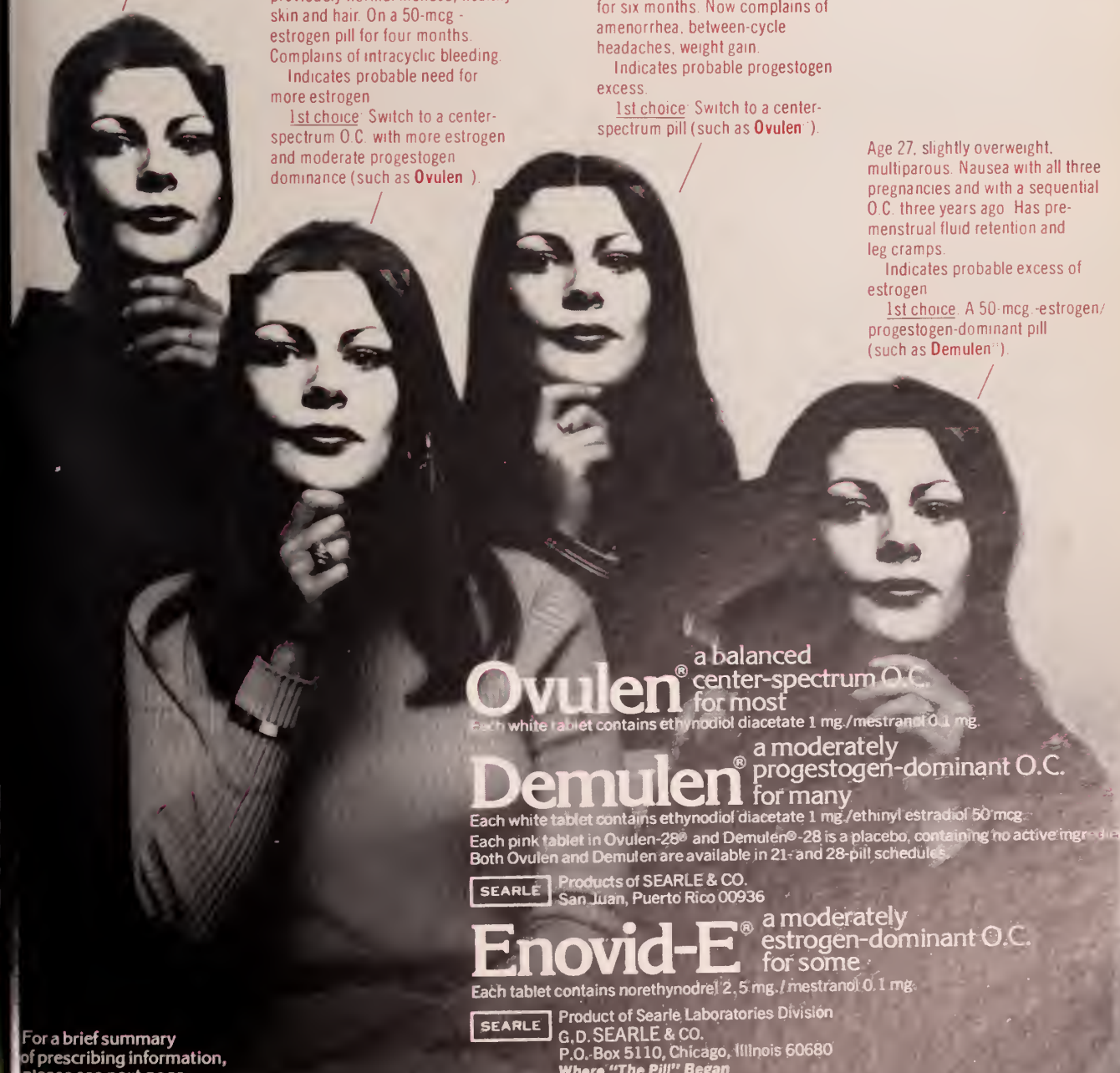
*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg.-estrogen O.C. Has recurrent trichomoniasis and Monilia.
Indicates estrogen deficiency and excess of progestogen in current O.C.
1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E**® or **Ovulen**® or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.
Indicates probable need for more estrogen.
1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen**®).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.
Indicates probable progestogen excess.
1st choice: Switch to a center-spectrum pill (such as **Ovulen**®).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.
Indicates probable excess of estrogen.
1st choice: A 50-mcg.-estrogen/progestogen-dominant pill (such as **Demulen**®).



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Actions – Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note – Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication – Ovulen and Demulen are indicated for oral contraception.

Contraindications – Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings – The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions – The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives – A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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Indication – Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

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Where "The Pill" Began

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his personal experience and educational background, he responsibly disagrees?

The question has been raised many times and in various ways. Over the years FDA officials have challenged distinguished clinicians and practicing doctors who openly advocate usage of prescription drugs in conditions and at dosage levels not indicated in the FDA-approved labeling.

In 1967, for example, Dr. Walter Modell reported that FDA lawyers were claiming that "publishers, authors and editors who have written, approved and published drug dosages which deviate from those recommended by the FDA are liable for damages. . . ." Objecting to this as regulation of medicine by fiat, "to which all doctors will have to turn like Holy Writ when they seek help on drugs," Dr. Modell called attention to the danger of letting FDA assume such power. "There must be free and unrestricted expression of opinion and publication of experience with drugs already officially described and delimited in FDA stuffers," he said, "if progress is to be made in therapeutics and if egregious errors, one way or the other, by the FDA, are to be promptly published and rectified."

Moreover, he said, "in the case of every single drug, the determination of actual efficacy, proper dosage, and safe use requires substantial experience by the expert as well as by the general practitioner. It is held by many that it takes about five years before a definitive statement can be made about a new drug."

The issue was rejoined in 1970 when FDA Bureau of Drugs Director, Dr. Henry Simmons, advised doctors that whenever they intended to prescribe a medication for use in a manner not approved in the official FDA labeling, they should first file a "Notice of Claimed Investigational Exemption for a New Drug" form.

AMA'S POSITION

AMA's Department of Drugs objected vigorously, fearing that "the FDA proposes to approve, forbid, monitor, collect, collate, evaluate, and disseminate results of all clinical experience with drugs in this country that is not consistent with package insert recommendations, regardless of the agency's statutory jurisdiction. . . . We believe the FDA should devote full attention to meeting its statutory obligations, not attempt to expand its statutory grant by regulating the practice of medicine."

AMA stressed that "the physician should always remember a subtle but important distinction: The FDA has no legal authority to approve the uses of marketed drugs; it approves what a manufacturer may *say* about these uses in its labeling and advertising."[10] Earlier, AMA had published its belief that "the package insert is part of the labeling of a drug and not a legal restriction on the thoughtful and careful use of a drug by an informed physician."[11]

That "subtle but important distinction" has never been acknowledged by the FDA, however, and increasingly, in liability actions brought against physicians, failure to adhere to the labeling recommendations is being portrayed by medical malpractice lawyers as *ipso facto* evidence of wrongdoing. Recognizing this, the American Academy of Family Physicians, in an April 7, 1972, letter to FDA, said that relative efficacy judgments in government-approved labeling would carry the threat of "implied police power, if in no other way by the threat of such regulations being used as a 'club' in malpractice suits." The academy, which represents 31,000 family physicians, urged that FDA abandon any plans to require relative efficacy statements.

One of the most astute students of the regulatory process in drugs worldwide is Sir Derrick Dunlop, the recently retired head of Britain's Medicines Commission, a sister agency to the FDA. Speaking at a symposium in Geneva in September 1971, Sir Derrick summed up the limits of regulatory power in the area of efficacy rulings by official regulators thus:

> "I do not believe that opinion on matters of efficacy should be formed by bureaucratic bodies, but rather through the free process of scientific publication, debate and undergraduate and postgraduate education. There is a danger that as regulatory agencies arrogate to themselves more and more the duty of dogmatising on the efficacy of medicines, that a so-called learned medical profession will eventually be reduced to signing forms entitling their patients to obtain such medicines as the regulatory agencies say they may have."

In a parallel vein, the Pharmaceutical Manufacturers Association wrote to the commissioner of FDA on Dec. 23, 1971, asking for a statement of intention from the agency on relative efficacy. "No authority exists in the stated terms of the statutes authorizing these activities by FDA," PMA president, C. Joseph Stetler, wrote, "nor is there any implied authority which might be derived from the legislative history of the act." Since pursuance of the plan to require relative efficacy statements "would significantly distort the practice of medicine," Stetler asked for an early clarification of FDA's position.

Four months later, in an address to the PMA's annual meeting, FDA Commissioner Edwards told PMA that "the physician—and he alone—can judge" the choice of medication, and that "FDA does not intend, through labeling, to preempt his judgment." But then he added that "if all drugs are properly labeled, relative efficacy ceases to be an issue." The question, of course, is what is proper labeling?

It is the general rule for FDA to interpret its regulatory powers very broadly; it may therefore be assumed that some agency personnel might deem it necessary for a "properly labeled" drug product to include relative efficacy information. It is imperative that the professions, the pharmaceutical industry and the public be alerted to the dangers of any official action or unannounced application of such a position by the Food and Drug Administration. There must be general recognition that labeling requirements by FDA in the area of relative effectiveness, to the extent that they are given medical and juridical recognition, would represent a fundamental new departure for American medicine, under federal control, unlike that found in any other national system. In the end, much will depend on how effectively physicians and consumers express their desire to avoid bureaucratic control of this sort, and how well they demonstrate that such procedures do not serve the public interest. ★★★

1155 15th Street, N.W. (20005)

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A CHANGE OF DIET

With the increased use of synthetic turf, the early bird may have to be satisfied with a plastic worm.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 26-29, 1972, Cincinnati. Annual Convention, June 24-28, 1973, New York City. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi Academy of Family Physicians, Annual Meeting, July 26-28, 1973, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 3112, Jackson 39201.

Mississippi State Medical Association, 105th Annual Session, April 30-May 3, 1973, Biloxi. Charles L. Mathews, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, The Field Clinic, Centreville 39631, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson 39201, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, P.O. Box 147, Port Gibson 39150, Secretary.

Clarksdale and Six Counties Medical Society, First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale 38614, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport 39501, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando 38632, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian 39301, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez 39120, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington 39095, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc 38863, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford 38655, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune 39466, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main St., Columbus 39701, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula 39567, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb 39648, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie St., Hattiesburg 39401, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, The Street Clinic, Vicksburg 39180, Secretary.

Radiologic Seminar CXXI: Hemomediastinum Associated With Anticoagulant Therapy

JAMES M. PACKER, M.D.
Jackson, Mississippi

ANTICOAGULANT THERAPY is widely used in the management of various types of cardiovascular disease. A number of complications resulting from its use have been described. Hemorrhage with hematoma formation has been noted in intestinal wall, rectus sheath, iliopsoas, retroperitoneal and adrenal areas. Other clinically significant problems encountered include hemothorax, hemoperitoneum, central nervous system hemorrhage, hemarthrosis, and cutaneous lesions of various types.[1]

The important fact that bleeding may originate from a pre-existing lesion such as carcinoma of the colon, peptic ulcer or pulmonary tuberculosis has been emphasized. A thorough search for an organic cause for bleeding is recommended in the individual under anticoagulant therapy who bleeds, particularly where the prothrombin time is in the usual therapeutic range.

Hemorrhage into the mediastinum associated with anticoagulant therapy would appear to be quite unusual. An example of this entity was recently encountered in our department.

CASE REPORT

A 39-year-old white female was admitted to the Mississippi Baptist Hospital with the complaint of severe substernal pain. Ecchymoses on the upper and lower extremities, hematuria, hemoptysis and melena were noted. The patient had received 7.5 mg of Coumadin daily for the past year following an episode of thrombophlebitis which appeared after hysterectomy. Pertinent laboratory studies on admission were: prothrombin time 36 seconds (control 12 seconds), hemoglobin 9 gm, hematocrit 32 volumes per cent. The electrocardiogram was negative. A chest film (see Figure 1) revealed widening of the mediastinum above the level of the aortic arch. There was no tracheal displacement.

She was treated with vitamin K and there was prompt return of the prothrombin time to normal range. There was apparent cessation of bleeding and subsequent relief of pain.

An upper GI series and barium enema were done with no abnormality being found on either study.

On a repeat chest film (see Figure 2) two weeks later, the mediastinal widening was no longer apparent. It was concluded that the abnormality seen on the original film was due to hemorrhage into this area.

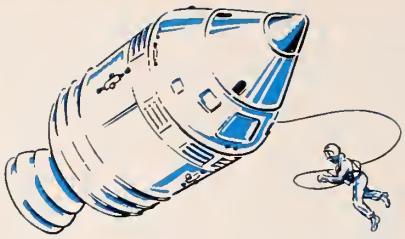
In a case report on hemomediastinum and hemothorax occurring in hemophilia, Bart[2] noted that non-traumatic mediastinal hemorrhage is uncommon in any condition, even in severe hemophilia. Spontaneous superior hemomediastinum has been described in elderly patients with the cause suspected to be bleeding from small arterio-

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist Hospital, Jackson, Miss.



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Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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Figure 1



Figure 2

sclerotic vessels occurring after a severe coughing or vomiting episode.[3]

In the present case we were unable to determine whether the bleeding came from the neck area with subsequent gravitation into the mediastinum, or whether it originated in the upper mediastinum itself. ★★★

1151 North State (39201)

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CHAMPUS NOTES

Family members and substitute family members, who in their own right are ineligible for CHAMPUS benefits, may be involved in psychiatric diagnostic and treatment programs, if, in the judgment of the therapist it is required to insure proper management of the patient.



The President Speaking

'Change Without Trauma'

CHARLES R. JENKINS, M.D.
Laurel, Mississippi

THE CONTROL of health care delivery seems to be slipping into so many different, grasping hands that none is likely to hold it firmly. If this is true, then no single force will influence the changing delivery system alone, especially before the growing power of third parties.

Ironic as it is, all of this appears to be happening at a time when American medicine is making good its commitment to upgrade quality, universal accessibility, prudent utilization, and progress in cost containment.

National health insurance, no longer so much a matter of if as when and what, is the overriding concern in this troubled picture. Even the more benign versions, such as the insurance industry's Healthcare, the administration's HMO-oriented plan, and our own AMA Medicredit, hardly guarantee the pluralism which has characterized our historic free-choice system. The prospect of unbuffered and abrasive ties to a monolithic NHI third party are less than pleasant.

Few physicians are so unrealistic and withdrawn as to deny that the delivery system is undergoing dramatic—sometimes traumatic—change. But with control of care delivery in a variety of hands, we can expect to see an institutionalization along rigid and inflexible lines.

But most of these pessimistic circumstances presuppose near-tacit and docile acceptance of change by the health care team under the "many hands" theory. Frankly, this is the farthest thought from the mind of American medicine.

Our programs are positive as we offer a better alternative. We are actively underwriting the quality of the professional service product. We offer a buffer, the honest broker, in the device of our foundation for medical care. To make this time different we must unify all elements of the health care team and pursue our positive programs with continued sincerity and determination. The health of the nation is too important to hand it to the politicians by default. ★★★

JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XIII, NUMBER 10
OCTOBER 1972

EDITORIALS

Report of the Delegates to AMA

San Francisco Annual Convention. The AMA House of Delegates met for a total of 17 hours and 20 minutes and acted on 59 reports and 130 resolutions during the 121st Annual Convention, June 18-22, 1972. Additional time was spent in reference committee discussion. Delegates named Dr. Russell B. Roth of Erie, Pa., President-elect. Other officers were named in the *AMA News.*

Dr. Carl A. Hoffman of Huntington, W. Va. in his inaugural address used as a theme, "A House of Medicine United—or a House Divided?" He spoke out strongly against unionism in our profession. He thought the power of the union was the strike, and a strike, even the threat of a strike, is a threat to withhold services. It is, therefore, a violation of medical ethics. He pointed out that millions of Americans still enjoy a close personal relationship with their physicians.

Dr. Wesley W. Hall of Reno, Nev., retiring president of the AMA, paraphrased President J. F. Kennedy's "Ask not what your profession can do for you, but what you can do for your profession." Dr. Hall said he "attempted to visit with every doctor possible at every medical meeting he attended." He recommended six considerations to the House:

(1) Study of physician manpower supply and medical schools to determine precisely how many doctors the country needs and how they should be distributed.

(2) Better liaison with medical schools.

(3) A national speakers bureau of the AMA.

(4) Improvement of liaison with constituent and component societies.

(5) A management survey of AMA.

(6) A three-times yearly report from AMA to delegates and state society officials showing current AMA membership, state by state.

OPINION POLL

The House received and adopted results of the first membership opinion poll on critical issues affecting the practice of medicine. Of the respondents, 73.1 per cent recommended that AMA continue to seek to retain the basic principles of private practice in any government enacted health program. Fifty-five per cent preferred the AMA plan of national health insurance over all others. The poll was critical of AMA on some issues and services and also was in accordance with many of the ideas as put forth by AMA.

PHYSICIANS' ASSISTANTS

The House approved a policy opposing employment of physicians' assistants in and by hospitals. The physician must direct the assistant. Guidelines for compensating physicians for services of physicians' assistants urged legislation to empower State Boards of Medical Examiners to approve a physician's employment of an assistant and to approve proposed functions of the assistant as described by his employer. The use of the term, physician's assistant, refers solely to the new occupations being developed to assist the physician in delivery of personal care services.

ALLIED HEALTH MANPOWER

The delegates voted to support efforts to increase the number and improve the utilization of medical, nursing and allied health personnel until 1975, and then to re-evaluate needs. They strongly supported and reaffirmed the expanded role for the nurse in providing patient care and related her to physicians' assistants so that complementation and not duplication will be the end result.

GRADUATE MEDICAL EDUCATION

Representatives of the AMA, Association of American Medical Colleges, Council of Medical Specialty Societies, American Hospital Association, the public, and the federal government will participate in a liaison committee on graduate medical education and a Coordinating Council on Medical Education. Intern, residents, and even medical students, will shortly be brought into these bodies.

MARIHUANA

"The AMA does not condone the production, sale or use of marihuana. It does, however, recommend that the personal possession of insignificant amounts be considered at most a misdemeanor with conservative penalties applied." The House also recommends its (marihuana) prohibition for public use.

FEE DETERMINATION

Doctors' fees can hardly be set by third parties, and only duly constituted members of organized medicine shall determine "usual, customary, and reasonable fees." Most of the discussion was directed at Aetna Life and Casualty Insurance Co.

OTHER ACTIONS

Other actions included receipt of a report from the Executive Vice-President, Dr. Ernest B. Howard, which delineated the many services rendered by the AMA central office and staff. It was enlightening.

Medical students can be taken into direct membership under a new procedure. The Atlantic City date in 1975 was reaffirmed and in 1976 the convention will go to Dallas.

Fireman's Fund has a new accepted contract for group disability insurance.

Discussion of terms of offices, selection of delegates, numerical representation and geographic representation of the Board of Trustees was held. The Council on Long Range Planning will explore these matters and delegates will vote in November 1972 on Board of Trustees terms.

Dr. Paul Dudley White of Boston received the fifth annual Sheen Award (including a check for $10,000.00) for outstanding contributions to medicine.

(This report was prepared by C. D. Taylor, Jr., M.D., of Pass Christian, Delegate to AMA.)

Would You?

Would you like to join a medical organization, one based on a free and absolutely representative government? One that is open to any competent and ethical physician? That is available in every state and nearly every country? That is concerned as much as its members permit in policing the ethics of medicine?

Would you?

Would you like to belong to a professional organization that is involved in attempting to bring solutions to every problem in the medical area of society, having first made sure it is a problem? An organization that gives you a floor for your opinions and representation in the development of policy from the country up to and through the states to the nation? One that studies hard and works hard to represent all segments of medicine? And still has to see to the problems and solutions of all of the people outside of medicine? And recognizes that it must do what individuals and small groups cannot do?

Would you?

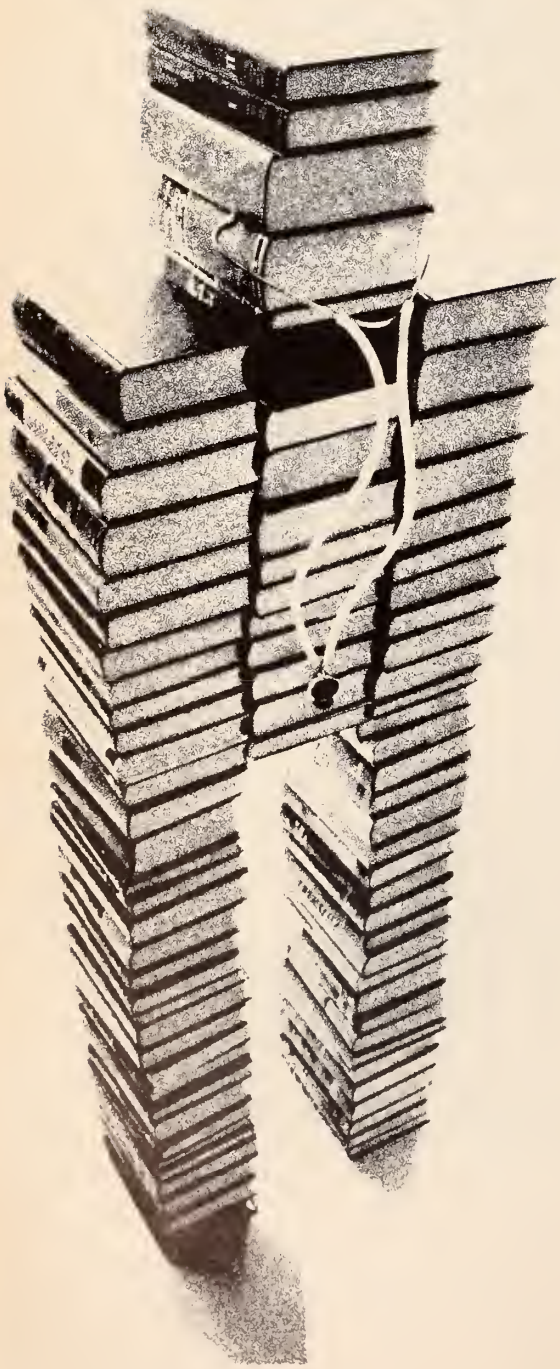
Would you believe that other doctors care—and really care enough about you and your opinions and your problems and your proposals to carry



"Here's one from your family doctor. . . . It says: regular check-ups would've prevented this."


Pink isn't exactly his color,
but he loves it for a change.
WinGel
aluminum-magnesium hydroxides
mint-flavored antacid liquid and tablets
For your ulcer and ulcer-prone patients...
a refreshing break from the
boring sameness of white antacids.
• pleasing mint flavor
• non-gritty texture
• formulated to avoid
constipation and laxation

Anatomy of a Doctor.



You know what it takes to make a doctor. The motivation. The years of study and training. The dedication. The hard work.

But from the criticism leveled at doctors lately you'd think neither the public nor press had any idea.

It may surprise you, but the public does.

This was evidenced in a recent Harris Poll. In measuring public respect for U.S. leadership, it showed a drastic drop in the past five years. And "a majority of Americans is currently willing to express a 'great deal of confidence' in only one profession—medicine—on a list covering 16 types of activity." And that list included Congress and the Supreme Court.

People still look at their doctors as men to be respected and as men of integrity.

This is the true story of the American doctor. And one which the AMA is constantly telling the public as part of its communications program.

In newspapers and magazines, the AMA tells what it takes to be a doctor. American medicine's achievements. And to express the profession's concern by providing information to help every American lead a healthier life.

We can be an even more effective spokesman...with your support. Find out more about what the AMA does for you and the public. Send for a free pamphlet. Write: Dept. DW, at the address below.

JOIN US.
WE CAN DO MUCH MORE TOGETHER.

American Medical Association
535 North Dearborn Street/Chicago, Illinois 60610

the ball all of the way to the national newspapers, television, and even the floor of the national legislative halls? Because you don't have the time or don't take the time or just don't care?

Would you?

Do you want to belong to a professional organization that sets the standards of professional care and that now establishes the means to audit and assure the standards of medical care delivered to the American people? All of the American people? An organization that establishes and approves standards of education for MD degrees, standards for surgeons, internists, orthopedists, and family practitioners and still protects the rights of all?

Do you?

Would you like to join a medical organization to whom the President, senators, members of Congress, governors, mayors, Jane Smith and Jimmy Jones and the editors of all newspapers come for advice and help on medical matters from a stumped toe to insurance and medical care for all people?

Would you?

Would you like to be part of a 124-year-old scientific organization that has been the greatest single impetus to scientific progress in medicine since its inception? And which today is more active in helping to discover the answers for the scientific problems of medicine and of getting it to doctors than all other organizations in the world?

Would you?

If you have never joined you have a stake like the rest of us. Just pay the pittance of dues, roll up your sleeves, and jump into work. You too, can be involved in the development of the next 30 years—the greatest years, potentially, in the history of this beautiful planet we have tried to destroy. And medicine will offer the greatest drama of all, and some of the most important and magnificant drama in all of human endeavor. And the AMA is the most important organization in the relation of medicine to society, government, business, and all other facets of human endeavor. And the state and county societies must provide the base from which it operates and from which ideas come. We all have a stake in a great future. Where we will go we do not know. But we dare not "sulk in our tents." We must be a part of all that happens. Our strength is the greatest medical organization in the world and in the doctors that have the courage and strength and compassion to make it great for all people.—John H. Saffold, M.D., immediate past president, Tennessee Medical Association, in the *TMA Journal,* December 1971. Reprinted with permission.

Kentucky Schedules Pediatric Ophthalmology Meet

The University of Kentucky will hold a Pediatric Ophthalmology Conference Dec. 15-16, 1972, at Lexington.

Subjects to be included are: rapid method for retinoscopy, decision-making in strabismus and amblyopia, conjunctival restrictive bands, aminocentesis and biochemical tests, microphthalmia, intraocular inflammation, and retrolental fibroplasia.

Faculty will consist of Drs. Taylor Asbury, John T. Flynn, Eugene M. Helveston, Reis Sheppard, Jonathan D. Wirtschafter, Richard A. Kielar, Wilbur C. Blount, and Stephen M. Weinstock.

Advance registrants will be able to purchase tickets for the University of Kentucky Invitational Basketball Tournament. Participating teams are Colorado State, Oregon, Nebraska, and Kentucky.

Registration fee will be $75 for practitioners, $10 for residents and fellows.

For information write Dr. Frank R. Lemon, associate dean for continuing education, College of Medicine, University of Kentucky, Lexington, Ky. 40506. Basketball tickets must be ordered by Nov. 13, 1972.

CHAMPUS Is Now Under ASD (H&E)

In order to bring management control of CHAMPUS closer to the immediate direction of the Secretary of Defense, effective July 1, responsibility for the program was consolidated under the Assistant Secretary of Defense (Health and Environment).

The Executive Agent arrangement previously used to administer the program involving the Secretary of the Army and the Army Surgeon General has been discontinued.

Although details of the reorganization have not yet been worked out, it is anticipated that the Assistant Secretary of Defense (Health and Environment) will continue as the staff advisor to the Secretary of Defense on CHAMPUS matters with responsiblity for policy formulation, program and budget development, resolution of major problems and liaison with the Congress and other defense and government organizations.

POSTGRADUATE CALENDAR

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Oct. 16-20, 1972

GASTROENTEROLOGY INTENSIVE COURSE
University Medical Center, Jackson
Oct. 16-20, 1972, beginning at 8 a.m.

Sponsored by the University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Lidio Mora, M.D., associate professor of medicine, the University of Mississippi School of Medicine, and chief, division of gastroenterology, the University of Mississippi Medical Center and the Jackson Veterans Administration Center

This one-week intensive course, the fifth offered this fall, will feature management of conditions most commonly seen in office practice. Registrants will review endoscopy of all kinds, including rectal sigmoidoscopy, and attend lectures and ward rounds at both the Medical Center and the VA.

Oct. 23-27, 1972

PEDIATRICS INTENSIVE COURSE
University Medical Center, Jackson
Oct. 23-27, 1972, beginning at 8 a.m.

Sponsored by the University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinators:
J. M. Montalvo, M.D., associate professor of pediatrics, the University of Mississippi School of Medicine
Nell J. Ryan, M.D., associate professor of pediatrics, the University of Mississippi School of Medicine

Participants will join in ward and intake rounds, refresh their skills in such areas as scalp vein techniques, use of the respirator, resuscitator, nebulizer and humidifier, and attend lectures on fluids, hematology, cardiology, immunizations, allergies, pediatric emergencies, pediatric surgery, renal problems and the care of the newborn.

Sept. 18-22, 1972
NEPHROLOGY INTENSIVE COURSE

Sept. 25-29
RADIOLOGY INTENSIVE COURSE

Oct. 2-6
ELECTROCARDIOGRAPHY INTENSIVE COURSE

Oct. 7
OTOLARYNGOLOGY SEMINAR

Oct. 9-13
STROKE AND NEUROLOGICAL DISEASE INTENSIVE COURSE

Oct. 13-14
HEMATOLOGY SEMINAR

Oct. 16-20
GASTROENTEROLOGY INTENSIVE COURSE

Oct. 23-27
PEDIATRICS INTENSIVE COURSE

Nov. 3-4
SURGERY SEMINAR

Nov. 6-10
OBSTETRICS INTENSIVE COURSE

Jan. 22-26, 1973
GASTROENTEROLOGY INTENSIVE COURSE

March 7
RENAL SEMINAR

April 30-May 3
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

DEATHS

GAY, EMMA VON G., Biloxi, M.D., Barnes Medical College, St. Louis, Mo., 1905; member of Fifty Year Club of MSMA; Emeritus member of MSMA and AMA; died Aug. 28, 1972, age 94.

LOWRY, JAMES L., JR., Mound Bayou, M.D., Meharry Medical College School of Medicine, Nashville, Tenn. 1942; interned Homer G. Phillips Hospital, St. Louis, Mo., one year; died Aug. 1, 1972, age 57.

MAGEE, THOMAS EDWARD, Gulfport, M.D., University of Colorado School of Medicine, Denver, Colo., 1951; died July 30, 1972, age 48.

Book Reviews

Review of Medical Microbiology. Tenth Edition. By Ernest Jawetz, Ph.D., M.D., Joseph L. Melnick, Ph.D., and Edward A. Adelberg, Ph.D., 518 pages with 58 tables and 246 illustrations. Los Altos, California: Lange Medical Publications, 1972. $8.00.

This book is a *review* of microbiology and was primarily written for medical students, house officers and practicing physicians. It is rather complete and comprehensive and most adequately supplies the needs for which it was intended. The original publication was in 1954 and each two years since that time it has been brought up to date by re-editing.

The present edition incorporates not only the recent advances and new information made available since the previous publication but also reflects new classifications and terminology. The current edition contains 518 pages, an increase of 34 pages from the ninth edition. It continues to conform to the earlier format with a durable soft cover, good binding, quality material and clear print. It is well illustrated with tables and figures. The 29-page highly illustrated appendix on medical parasitology has been retained and is quite valuable. No new chapters have been added but pre-existing chapters have been brought up to date. The greatest amount of new material has been introduced into the 15 chapters dealing with the viruses.

This book is not one dominated with techniques and methods but is more concerned with microbiologic principles. Chapters devoted to antimicrobial therapy, biochemistry, antigens and antibodies, microbial genetics, principles of diagnostic microbiology, serologic diagnosis and virology make this a very valuable book for quick reference for the busy practicing physician who treats infections or is concerned with chemotherapy.

The book is highly recommended and should be in every practitioner's library.

JOHN F. BUSEY, M.D., Jackson, Miss.

General Urology. Seventh Edition. Edited by Donald R. Smith, M.D. 436 pages with 153 illustrations. Los Altos, California: Lange Medical Publications, 1972. $8.50.

This is probably the textbook most widely used by academic urologists in the United States in the instruction of medical students. It is a soft cover book of plain design. The print used in the book is small. While these may be objectionable features to some, they permit the inclusion of a large volume of material in a book of modest cost which is revised and up-dated yearly by its author. Dr. Smith is a well respected authority in urology and, while the format of the book does not permit exhaustive treatment of all controversial aspects of urologic topics, the authority of the book can generally be accepted.

The first few chapters deal with the anatomy and embryology of the genitourinary system, signs and symptoms of genitourinary disease, and methods of examination of the genitourinary system. These chapters are of greatest value to the beginning student but offer a good review for more advanced practitioners. The whole range of diagnosis and treatment of urologic diseases is included in the remainder of the text. It is a valuable and useful reference for residents and practitioners as a starting place in the study of urologic disease. In most cases, the information presented is adequate for practical understanding. For those who desire more exhaustive study, the bibliography at the end of each topic is extensive, authoritative, and up to date.

In summary, this is an excellent text which has made an outstanding contribution to medical education. It is required reading for medical students at the University of Mississippi School of Medicine and would be a valuable addition to the library of any practitioner who has occasion to see patients with urologic disease.

W. LAMAR WEEMS, M.D., Jackson, Miss

NEW MEMBERS

HARPER, JOHN R., Taylorsville. Born Laurel, Miss., Jan. 14, 1944; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1970; interned Confederate Memorial Hospital, Shreveport, La., one year; elected by South Mississippi Medical Society.

PERSONALS

LARRY B. AYCOCK and JOHN D. MORGAN announce their association in the practice of internal medicine at 622 Delaware Avenue in McComb.

H. B. BARNES announces the removal of his office to Suite 204, Medical Plaza in Hattiesburg.

HIRAM W. K. BATSON, formerly of Brookhaven, is now fulltime associate professor of obstetrics and gynecology at the Tulane University School of Medicine in New Orleans.

WILLIAM A. BILLUPS, JR., has associated with Drs. Thornton, Riley and Tucker, P.A., in the practice of general and thoracic surgery at the Medical Arts Clinic, 2115 14th Street in Meridian.

J. A. BROWN has set up practice in Mantachie.

PAUL B. BRUMBY of Lexington has been appointed chairman of the Mississippi Physicians for the Re-election of the President.

W. HOLLIS BURROW of Greenville has been named Mississippi chairman for the presidential campaign of the American Party candidates, John Schmitz and Tom Anderson.

MARSHALL CHAMBERLIN has accepted a National Health Service Corps assignment to practice in Hickory Flat for two years.

O. D. DABBS of Gulfport was guest speaker at the Coast County Medical Assistants meeting in Gulfport.

JAMES C. HAYS of Jackson has been elected 1972-73 vice president of the Hinds County Heart Association. H. DAVIS DEAR of Jackson was named medical representative and JAMES L. CROSTHWAIT of Jackson will be in charge of emergency cardiac care.

RITA C. HEIDISCH has opened offices for the practice of pediatrics at 4500 West 15th Street in Gulfport.

WILLIAM M. HILBUN has associated with WILLIAM G. RILEY and JOHN D. MCEACHIN of Meridian at the Medical Arts Clinic, 2115 14th Street.

S. S. KETY of Picayune was honored for 30 years of perfect attendance at Rotary Club during the club's regular monthly meeting.

D. C. MONTGOMERY, JR., of Greenville was in charge of publicity for the American Numismatic Association convention in New Orleans. Dr. Montgomery is on the board of directors of the coin collectors' organization.

DALTON S. OLIVER and ROBERT B. BEGG have associated with the Field Clinic in Centreville for the practice of diseases and surgery of the eye.

GEORGE R. ROBINSON announces the opening of his practice of internal medicine and gastroenterology in the offices of HANSEL JANET, 450 Pass Road in Gulfport.

F. J. SELMAN, JR., formerly of Biloxi, announces his relocation at 140 Sans Souci Avenue in Ocean Springs 39564.

WILLIAM A. SPENCER has opened offices for the general practice of medicine in Sardis. Dr. Spencer's mailing address is P. O. Box 369.

WILLIAM STEVENS, III, NATH T. CAMP, CHARLES E. GRISSOM, and TOM S. COOPER have joined the staff of Mississippi Baptist Hospital in Jackson as fulltime physicians staffing the emergency room.

EDSEL STEWART of McComb held an exhibition of new paintings in the McComb Gallery recently. Dr. Stewart is an obstetrician-gynecologist.

JOE W. WALKER of Water Valley has been appointed head of the new Coronary Care Unit opened at Yalobusha General Hospital. M. S. MCMILLAN will assist Dr. Walker.

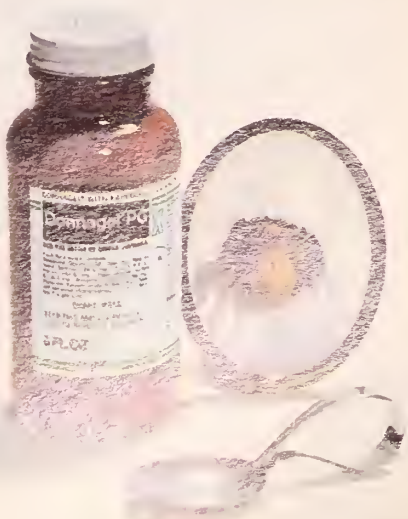
JERRY W. WELCH has affiliated with the Boone Clinic, 531 Fifth Avenue in Laurel for the general practice of medicine.



"For generations my family has insisted on Donnagel®-PG," says active young matron Mrs. T. Farnsworth Lipp (of the Upper Lipps), shown here with her charming son. "All the benefits of paregoric—without the unpleasant taste, don't you know? And Junior thinks Donnagel-PG tastes so much like bananas that I never worry about a slip between spoon and Lipp."

A Matter of Taste

With or without a silver spoon, a most tasteful solution in treating acute, non-specific rrheas: all the benefits of paregoric, without the unpleasant taste. Donnagel®-PG treats mpanying cramping, tenesmus, and nausea as well as the diarrhea itself. Instead of leasant-tasting paregoric, it contains the therapeutic equivalent, powdered opium, promote the production of formed stools and lessen the urge. And it provides the ulcent-detoxicant effects of kaolin and pectin, plus the antispasmodic benefits of adonna alkaloids. And a good banana flavor to baby any taste.



Donnagel®-PG

Donnagel with paregoric equivalent

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Each 30 cc. contains: Kaolin, 6.0 g.; Pectin, 142.8 mg.; Hyoscyamine sulfate, 0.1037 mg.; ppine sulfate, 0.0194 mg.; Hyoscine hydrobromide, 0.0065 mg.; Powdered opium, USP, 24.0 mg ivalent to paregoric 6 ml.) (Warning: may be habit forming); Sodium benzoate (preservative), mg.; Alcohol, 5%. A.H. Robins Company, Richmond, Virginia 23220

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coughs are back...



clear the tract!

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

Robitussin®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Alcohol, 3.5%	

For unproductive allergic coughs

Robitussin A-C®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.
(warning: may be habit forming)	
Alcohol, 3.5%	

Non-narcotic for 6-8 hr. cough control

Robitussin-DM®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Dextromethorphan hydrobromide	15.0 mg.
Alcohol, 1.4%	

Clears sinuses and nasal stuffiness as it relieves cough

Robitussin-PE®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Phenylephrine hydrochloride	10.0 mg.
Alcohol, 1.4%	

Robitussin-DM in solid form for "coughs on the go"

Cough Calmers®

Each Cough Calmer contains:

Glyceryl guaiacolate	50.0 mg.
Dextromethorphan hydrobromide	7.5 mg.

with the ROBITUSSIN® LINE

Select the Robitussin® "Clear-Tract" Formulation That Treats Your Patient's Individual Coughing Needs:

All 5 Robitussins have an EXPECTORANT-DEMULCENT action. Keep this handy chart as a guide in selecting the formula that provides the *extra* benefits you want for your patient.

Robitussin® extra benefit chart	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ROBITUSSIN®					●
ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●		●		●
ROBITUSSIN-PE®				●	●
COUGH CALMERS®	■		■		■

A. H. Robins Company,
Richmond, Virginia 23220

A·H·ROBINS



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

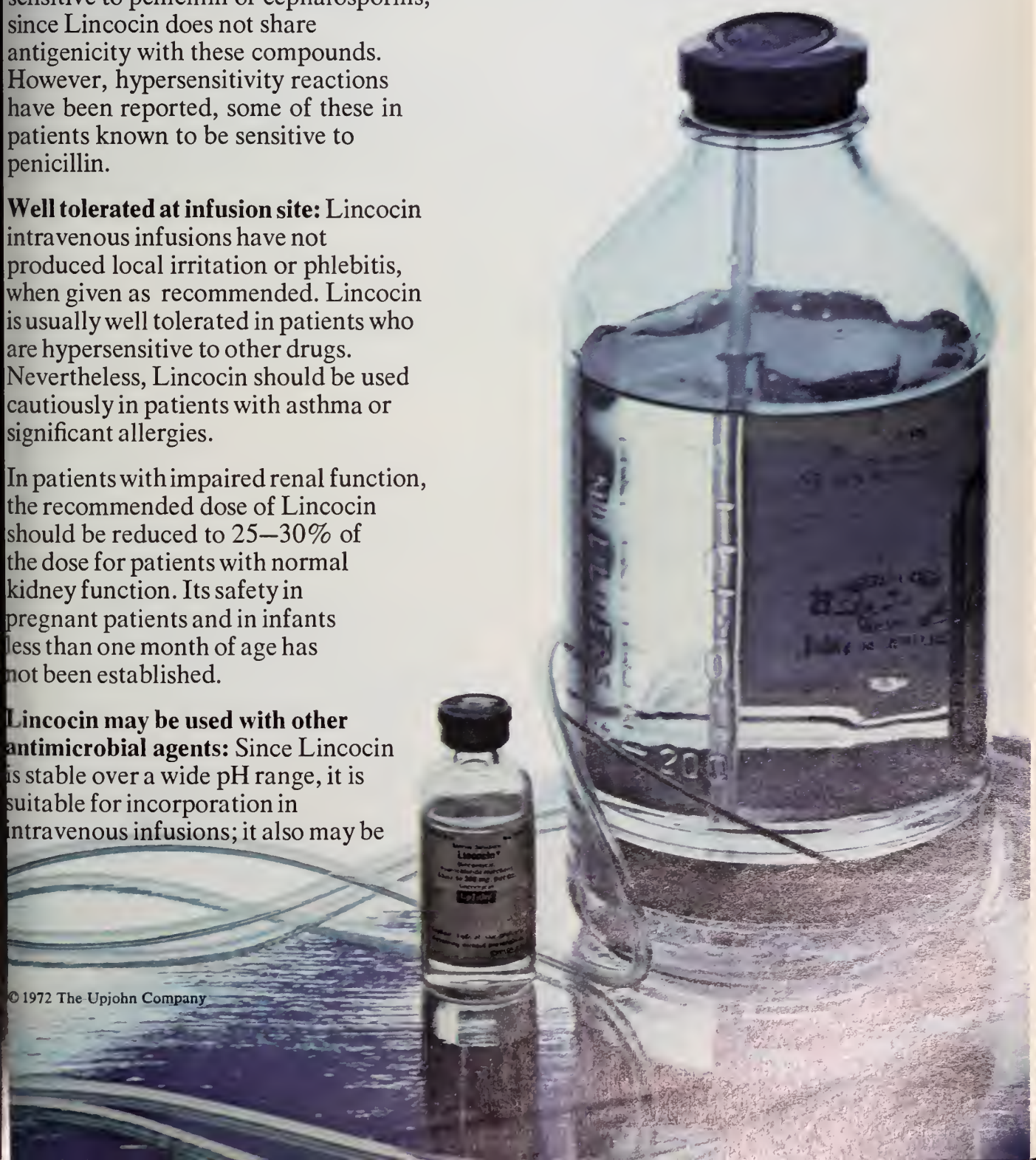
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reaction*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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MSMA Board of Trustees Handled Full Agenda at August Meeting

Referrals from the recent 104th Annual Session of the House of Delegates, a proposed rate increase in the St. Paul Company/MSMA Professional Liability Insurance Program and a status report on the association's EMCRO-Peer Review Projects were among many items of business coming before the Board of Trustees at its regular summer meeting on Aug. 24-25.

The EMCRO Project reported a recent expansion from eight to 29 hospitals participating in the program's inpatient review system. The expansion is part of the project's second year operations. The Board authorized the project to conduct regional workshops for hospital chiefs of staff and other interested persons for the purpose of reviewing EMCRO activities and discussing inpatient hospital care quality review techniques. The Board further authorized EMCRO to initiate a system for care quality review of emergency room services.

Referrals from the House of Delegates concerned membership recruitment, legislation and other organizational activities for the 1973 association year. The Board requested an early report from the Council on Legislation concerning the association's legislative program particularly with respect to the subjects of chiropractic licensure, driver limitation programs and insurance coverage of newborn infants as acted upon by the House of Delegates.



The MSMA Board of Trustees met at Pickwick Dam in Tennessee for the regular summer meeting in August. A full agenda was handled including referrals from the House of Delegates.

The Board approved a request from the St. Paul Insurance Company for a 14 per cent premium increase in the MSMA Professional Liability Insurance Program based upon claims experience and actuarial requirements. The St. Paul Company will seek approval from the Mississippi Insurance Commission for the increase and keep MSMA policyholders apprised of developments in this regard.

Prior to its meeting, the Board of Trustees met with other Directors of the Mississippi Foundation for Medical Care and approved plans for a foundation membership drive which began in September. The Directors formulated immediate objectives of the foundation as being: peer and utilization review and development; study and development of professional fee schedules; definition of quality care standards; and serving as an intermediary between the physician and third party payors/health insurance carriers.

In other actions the Board approved assignment of National Health Service Corps' physicians to Calhoun City and Mantachie, in accordance with policies of the House of Delegates and federal certification requirements and authorized a leadership symposium on national health financing proposals this Fall. The leadership symposium will be conducted by officers and staff of the AMA and will focus on preparing participants to speak to the issues on health care financing in their home towns.

The Board scheduled its next meeting for Dec. 13-14 and invited the newly named AMA Field Representative for Mississippi, Mr. Fred N. André, to attend the meeting.

Developmental Disabilities Grants Awarded

The Mississippi Interagency Commission has made three grants totaling $36,057.06 for developmental disabilities programs in three state agencies. A grant of $23,818 was made to Ellisville State School for expansion of an evaluation center financed by the state Junior Chamber of Commerce. Another grant of $7,984.06 was made to the Mississippi Hospital-School for Cerebral Palsy, and a third, for $4,255, went to the State Board of Health.

All involve purchase of equipment which will enable the institutions to expand or improve various existing services to the developmentally disabled.

Ellisville State School's Jaycee Evaluation Center is used for evaluation of developmentally-disabled individuals and for conferences with the families of these individuals. The MIC grant will enable the school to purchase audiovisual equipment, video equipment, tapes and other equipment to be used in instructing families in care of retarded individuals.

The grant to the cerebral-palsy unit will make possible the purchase of an eight-passenger van wagon, photography equipment and reading program materials. The van will be used to transport children to and from the hospital for surgery, physician visits and other medical services, as well as for educational field trips. The photography equipment will be used to take preoperative and postoperative still pictures and movies so that surgery and treatment may be better planned and evaluated.

The grant to the State Board of Health will purchase equipment and supplies used in extending service statewide to children with neurological disorders. The Division of General Health Services of the State Board of Health conducts clinics for children with neurological disabilities such as epilepsy, brain damage and mental retardation.

Join MPAC Today

Albany Med College Plans Cruise

The Department of Postgraduate Medicine of Albany Medical College announces reservations are now being accepted for the Fourteenth Postgraduate Medical Seminar Cruise, Jan. 5-22, 1973.

An 11-day cruise will leave from New York aboard the luxurious and distinguished ship 'Gripsholm" of the Swedish American Line.

Ports of call include St. Maarten, Martinique, Barbados, St. Vincent, Grenada, Curacao, Antigua and St. Croix.

Faculty of the Albany Medical College will present a comprehensive shipboard postgraduate program, covering subjects in pediatrics, psychiatry, surgery, hematology and physiology.

Request has been made for continuation study credit by the American Academy of Family Practice.

For information write to: Dr. Frank M. Woolsey, Jr., Department of Postgraduate Medicine, Albany Medical College, Albany, New York 12208.

Aetna and W. Va. Develop Program

An Aetna Life & Casualty proposal to provide a professional insurance program for the more than 1400 members of the West Virginia State Medical Association was accepted unanimously by the association's House of Delegates during their recent 105th Annual Meeting.

The plan, developed jointly by the West Virginia State Medical Association and Aetna, is one of the most comprehensive yet devised for a medical society. It consists of a package of normally separate property and liability coverages designed to assure association members access to a total professional insurance program on a long-term basis. It will be made available to association members effective December 1 through their local Aetna agents.

The program, which will be coordinated through a fulltime Aetna administrator, features a number of special measures. To speed claim payments and assure the highest possible standards of medical care, committees administered jointly by Aetna and the state medical association will review all cases involving possible professional liability from medical, legal and educational standpoints.

Also, in an effort to control insurance costs and thus medical costs to the public, expenses and claim payments will be reviewed annually and dividends may be declared by Aetna's board of directors.

Included in the program are professional and office premises liability coverages and catastrophe insurance that exceeds basic coverages. In addition, as an option, professional equipment coverage is available.

Aetna, one of the nation's largest writers of liability insurance, completed development of the program's principles in cooperation with the association's Insurance Committee. The completed program was submitted to the House of Delegates with the recommendation that the plan be wholeheartedly endorsed by the association. The subsequent resolution was passed by a unanimous vote.

New Alcohol Program Begun by SBH

The problems of alcohol abuse and alcoholism directly affect the lives of approximately 64,000 Mississippians, and each of these 64,000 in turn affects the lives of five more citizens. Dr. Hugh B. Cottrell, State Health Officer, has announced that a new program, the Mississippi Alcohol Abuse and Alcoholism Program, has been created to help combat the far-reaching effects of this public health problem.

According to Dr. Cottrell, 42,000 employees in Mississippi (5 per cent of the entire work force) have impaired job performance due to alcohol problems; and in over 50 per cent of Mississippi's highway fatalities in 1971, alcohol abuse was a significant factor. The Alcohol Abuse and Alcoholism Program (AAAP) will operate on the regional and community levels to significantly reduce the waste of manpower and dollars caused annually by alcohol problems.

The AAAP has been funded through a grant made to the State Board of Health by the National Institute on Alcohol Abuse and Alcoholism under the provisions of the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970. It is located within the Division of Mental Health Services under the direction of Dr. Nina B. Goss-Moffitt.

Harold B. Armstrong has been named AAAP supervisor. Speaking of the program's goals, he said, "Mississippi has a number of programs in operation or proposed which focus on problems of abuse and alcoholism, but much more needs to be done in this area in order to launch an effort comparable to the nature and magnitude of the problems. The great challenge is to develop a united, coordinated, and comprehensive approach."

Mrs. Anne D. Robertson has been named assistant supervisor in charge of outreach, treatment, and rehabilitation services. The AAAP itself will not directly operate any treatment or rehabilitation services. However, Mrs. Robertson will work with three regional coordinators to identify the needs of individual communities and aid the communities themselves in coordinating existing services for the treatment and rehabilitation of the alcoholic. They will also act as consultants to programs and individuals interested in developing new facilities. Named as regional coordinators are James W. Landrum of Starkville, Alvin Malone of Greenwood, and Walter A. Price of Hattiesburg.

The assistant supervisor in charge of preventive services will be Thomas W. Padgett. Among the preventive services which AAAP hopes to develop are a program of public information and education on the problems of alcohol abuse and alcoholism through the mass media and voluntary organizations, special courses for high schools and colleges to prepare students for encounters with the alcohol problem, and training and research programs for those in the alcohol problems field.

Padgett will also be in charge of AAAP's special projects. These services will include the development of programs for minority groups such as blacks, Indians, and the poor; programs in safety and rehabilitative education related to public drunkenness and drunken drivers; and educational and rehabilitative programs in both governmental agencies and private industries. Working with Padgett as occupational program specialists will be Joseph A. Panetta of Jackson and Richard L. Williams of Moss Point. Both men will work to develop programs for the early identification of alcohol problems and for the treatment and rehabilitation of the alcoholic employee; but Panetta will work mainly with state government agencies, while Williams will work with private industries.

The AAAP will also work with an advisory council made up of representatives of various concerned organizations to provide program policy, a university consortium to provide educational and research resources, and an interagency council to provide increased professional activity. Through the combined efforts of these groups and its staff, the AAAP will work to provide facilities for the prevention of this disease and the treatment and rehabilitation of those affected by it.

For further information, write the Alcohol Abuse and Alcoholism Program, P. O. Box 1700, Jackson 39205.

Pinworm therapy is often a family affair





Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anore nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddin and headache have occurred. Rarely, tinnitus, hyperirritabil numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise i cephalin flocculation and SGOT; perianal rash, cholestasis a parenchymal liver damage; hyperglycemia; transient leukop malodor of the urine, crystalluria, hematuria; appearance of Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg Mintezol®

(THIABENDAZOLE | MSD)



so easy to take everyone in the family can keep to the regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

addendum

MSD MERCK SHARP & DOHME

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



Round and round she goes and where she stops...

Antivert® (meclizine HCl) for vertigo*

Indicated in the management of nausea, omiting and dizziness associated with mo-ion sickness.

Found useful in the management of verti-o associated with diseases affecting the ves-ibular system.

Available as Antivert® (12.5 mg. meclizine HCl) blue and white scored tablets and also Antivert®/25 (25 mg. meclizine HCl) yel-ow and white scored tablets.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer

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New York, New York 10017

Medicaid Changes Reported

At a recent meeting of the Mississippi Medicaid Commission Technical Advisory Committee on Physicians' Services, several items were discussed which the committee felt should be brought to the attention of all participating physicians. There are also some recent changes in coverage of physicians' services under Medicaid.

Effective immediately, the Medicaid fees for house calls to a *Medicaid only recipient* are increased as follows:

Procedure Code	*Description of Service*	*From*	*To*
9010	Initial House Call, routine, new patient or new illness, history on examination	$10.00	$12.00
9014	Follow-up House Call, routine	8.00	10.00

This adjustment is being made to help meet the physician's travel costs for making house calls and is not an increase in the professional fee allowed. Page D-3 of the Physicians' Manual should be corrected to reflect this change.

Effective immediately, sickle cell testing is a covered laboratory procedure when performed in the physician's office. This procedure was previously covered only if performed as a part of inpatient hospital services, outpatient hospital services, or by an approved independent laboratory. This procedure should be added to Page D-2 of the Physicians' Manual as follows:

Procedure Code	*Description of Service*	*Fee*
8623	Sickle Cell Test	$1.60

The committee discussed questions raised by several physicians on the possibility of adding certain other laboratory procedures to the list of laboratory procedures currently being covered by Medicaid in the physician's office. Several factors were involved in the decision to limit the number of laboratory procedures which would be covered; i.e., funds available, potential utilization, etc. These factors have not changed sufficiently to warrant any significant changes in the Medicaid laboratory policies. Medicaid policies are continually reviewed for program funding and overall priorities with an aim toward making indicated program changes, reported Dr. Alton B. Cobb, director.

He added, "We feel that it is important for you to keep in mind that whenever you do render a service to a Medicaid recipient which is a *non-covered service*, such as a laboratory service which is not on the covered list, you may *bill the patient for the service*. This applies to *Medicaid only recipients* and not to those covered by Medicare, Part-B."

In reviewing a copy of the report on Medicaid claims activity, number received, paid, returned, etc., the committee felt that if a particular physician were having a high percentage of his claims returned for correction, etc., there should be some mechanism by which this problem could be corrected. To assist Medicaid in dealing with this problem, physicians are requested to advise the commission if a high percentage of claims are being returned.

End-of-the-year expenditure data for FY 1972 have just been completed and the program completed another year of operation within total funds appropriated. MMC has now completed two and one-half years of operation for the program in Mississippi without an end of the year deficit, said Dr. Cobb.

PMA Offers Faculty Awards

The Pharmaceutical Manufacturers Association Foundation has announced it will offer faculty development awards for 1973 to help meet manpower needs in clinical pharmacology.

Thomas E. Hanrahan, executive director of the foundation, said the purpose of the award program, which was inaugurated in 1966, is to stimulate teaching, training, and research in the field of clinical pharmacology.

Medical schools are given the opportunity to suggest candidates at the junior faculty level who indicate a "strong determination for a full-time career in clinical pharmacology, either in a medical school, or related institution, or in the pharmaceutical industry."

The two-year awards to begin July 1, 1973, include variable salary features and other benefits. The deadline for applications is Nov. 1; names of those selected to receive the awards will be announced by Dec. 15.

Hanrahan said recipients will be selected by the foundation's Board of Directors, based upon recommendations from an advisory committee composed of individuals from the pharmaceutical industry, the academic community, and the government.

Awards for 1972 went to five individuals, bringing to 24 the number awarded under the program.

Encounter under the Scanning Electron Microscope



SEM reveals changes in *E. coli* exposed to antibacterial agents

The Scanning Electron Microscope (SEM) is the only instrument which gives 3-dimensional views on a microscopic level. This permits the surface morphology of microorganisms to be observed in detailed perspective. Changes in surface morphology of *E. coli* exposed to various antimicrobial agents are seen on the following page. An SEM photomicrograph of normal control *E. coli* appears above.









Different modes of antibacterial action — Similar changes in morphology

As part of a series of experiments,[1-3] strains of *E. coli* proven susceptible to each antibacterial agent were exposed to 1 MIC of the respective antibacterials for a three-hour period. Included were cell-wall-active drugs, ampicillin and cephalothin; a drug interfering with intracellular protein synthesis, tetracycline; and a chemical agent which acts by interference with para-aminobenzoic acid, sulfamethoxazole.

As seen above, elongation of the bacilli, mid-cell defects and spheroplast-like forms may be appreciated with the SEM technique. These changes in bacterial morphology were similar... regardless of the antibacterial agent used and irrespective of its mechanism of action.

"At present, the significance of these observations in clinical infection must be considered with caution, but it is hoped that these data will stimulate a reevaluation of present concepts of the nature and role of morphological variants of bacteria exposed to a variety of antibacterial factors."[2]

It should be noted that no clinical conclusions can be drawn from this study, as it is not always possible to extrapolate *in vitro* data to humans.

References: 1. Klainer, A. S.; Fass, R. J., and Perkins, R. L.: Scientific Exhibit presented at the 25th American Medical Association Clinical Convention, New Orleans, La., Nov. 28-Dec. 1, 1971. **2.** Klainer, A. S., and Perkins, R. L.: *Antimicrob. Agents Chemother., 1*:164, 1972. **3.** Klainer, A. S.: Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A be hemolytic streptococcal infections and will not eradicate prevent sequelae (rheumatic fever, glomerulonephritis) of su infections. Deaths from hypersensitivity reactions, agranulocy sis, aplastic anemia and other blood dyscrasias have been ported and early clinical signs (sore throat, fever, pallor, purpu or jaundice) may indicate serious blood disorders. Frequent C and urinalysis with microscopic examination are recommend during sulfonamide therapy. Insufficient data on children und six with chronic renal disease.

Precautions: Use cautiously in patients with impaired re or hepatic function, severe allergy, bronchial asthma; in glucos 6-phosphate dehydrogenase-deficient individuals in whom do related hemolysis may occur. Maintain adequate fluid intake prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytos

Encounter in Clinical Practice

Control of primary bacterial offenders

Antibacterial Gantanol® (sulfamethoxazole) controls susceptible strains of *E. coli* and other gram-negative and gram-positive organisms often implicated in acute nonobstructed pyelonephritis and cystitis.

Prompt antibacterial blood and urine levels

In from 2 to 3 hours after the initial 2-Gm adult dose, antibacterial levels are present in both the blood and urine.

B.I.D./T.I.D. dosage for around-the-clock coverage

Subsequent 1-Gm doses provide up to 12 hours of antibacterial coverage. More severe u.t.i. may require a q. 8 h. dosage regimen. Either schedule provides coverage during the waking and sleeping hours—especially important during hours of sleep when normal urinary retention tends to favor bacterial proliferation.

Also effective in nonobstructed chronic and recurrent u.t.i.

It is not uncommon for the elderly and the debilitated to develop chronic and/or recurrent nonobstructed urinary tract infections such as pyelonephritis and cystitis. Such cases often respond satisfactorily to Gantanol. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents including sulfonamides, especially in chronic or recurrent u.t.i.

Your Option: Tablets or Suspension

Either dosage form—the Tablets or the pleasant-tasting, cherry-flavored Suspension—can provide the dependable antibacterial activity necessary to control susceptible nonobstructed cystitis and pyelonephritis. Symptomatic improvement may usually be expected in 24 to 48 hours. The usual precautions with sulfonamide therapy should be observed, including adequate fluid intake. Gantanol (sulfamethoxazole) is generally well tolerated with relative freedom from complications; the most common side effects are nausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examination are recommended.

In nonobstructed cystitis and pyelonephritis due to susceptible organisms

Gantanol®
(sulfamethoxazole)
Basic Therapy

---

lastic anemia, thrombocytopenia, leukopenia, hemolytic anea, purpura, hypoprothrombinemia and methemoglobinemia); *ergic reactions* (erythema multiforme, skin eruptions, epiderl necrolysis, urticaria, serum sickness, pruritus, exfoliative rmatitis, anaphylactoid reactions, periorbital edema, conjunctal and scleral injection, photosensitization, arthralgia and ergic myocarditis); *gastrointestinal reactions* (nausea, emesis, dominal pains, hepatitis, diarrhea, anorexia, pancreatitis and matitis); *CNS reactions* (headache, peripheral neuritis, men- depression, convulsions, ataxia, hallucinations, tinnitus, ver- and insomnia); *miscellaneous reactions* (drug fever, chills, ic nephrosis with oliguria and anuria, periarteritis nodosa and . phenomenon). Due to certain chemical similarities with me goitrogens, diuretics (acetazolamide, thiazides) and oral poglycemic agents, sulfonamides have caused rare instances goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

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Medical Center Announces Staff Changes

In faculty changes at the University of Mississippi School of Medicine, three have moved into assistant professorships.

Former clinical assistant professor of anesthesiology Dr. Jesse Mullen has joined the full-time faculty at the same level.

Dr. John E. Rawson, pediatrics instructor, is now an assistant professor, as is Mrs. Frances Freeman, former clinical laboratory sciences instructor.

St. Dominic Gets Nursing Grant

St. Dominic-Jackson Memorial Hospital in Jackson has received one of the first seven grants totaling more than $406.000 awarded under the Nurse Training Act of 1971 for projects to encourage upward mobility in nursing and fully utilize talent for R.N. careers.

St. Dominic's Hospital got $32,695 for an 8-week summer remedial assistance and guidance program for students hampered by educational deficits.

The grants were made by the Division of Nursing, a component of the Bureau of Health Manpower Education at HEW's National Institutes of Health.

Division of Nursing Director Jessie M. Scott said, "Since 1967 we have been awarding contracts to socially aware agencies for projects to recruit members of minority groups and the male population into nursing education. Now schools of nursing and other health and educational entities are also eligible for grants to undertake recruitment and upward mobility activities. This means that many more able students can emerge from conditions of disadvantage to achieve careers as professional nurses."

Requests for consultation concerning participation in the Nurse Training Act provision of Grants and Contracts to Encourage Full Utilization of Educational Talent for Nursing may be addressed to the Division of Nursing, 9000 Rockville Pike, Bethesda, Md. 20014.

Hospital Safety Manual Published

Safety in hospitals everywhere, all the time, is the goal of the new *Safety Guide for Health Care Institutions.*

The 238-page manual assists hospital personnel in recognizing and eliminating potential health hazards. The guide is published jointly by the American Hospital Association and the National Safety Council.

The "Four E's" of safety—enthusiasm, education, engineering and enactment—provide the key to a comprehensive accident prevention program. All sources of danger to the patient, visitor and employee, ranging from falls to fires, are carefully examined.

Specific safety precautions in specialized departments, such as the use of mastic tile in laboratories, are described in detail. Sample safety checklists are provided for supervisory personnel. Inspections and record-keeping are encouraged as a means to maintain safe conditions.

Also included are supplementary references, a list of safety-related organizations and a summary of the major provisions of the Occupational Health and Safety Act of 1970.

Copies are available at $4.50 each from the American Hospital Association, Order Control Department, 840 N. Lake Shore Drive, Chicago, Ill. 60611.

AAP Receives OEO Grant

The American Academy of Pediatrics has received an $845,000 grant from the U. S. Office of Economic Opportunity to organize and deliver health services through local academy chapters to economically and geographically disadvantaged pediatric populations.

The program is designed to involve AAP chapters directly in developing and demonstrating methods for delivering health care services to pediatric populations lacking sufficient access to sources of primary health care.

In essence, the AAP-OEO grant will provide funding for AAP chapters to provide medical and dental care for infants, children and adolescents through a detailed management plan developed jointly with representatives of target populations in local communities.

Interested chapters will work with community

action agencies and regional OEO offices to identify potential target areas.

Once a chapter has developed a plan for a program, the chapter will submit its proposal to the appropriate local areawide planning agency. The proposals will also be submitted to the Department of Community Services at the AAP, as well as to the appropriate department within OEO.

Proposals receiving favorable review will be given technical assistance and funding directly from the AAP with monies obtained from OEO under the terms of the grant.

The local facilities for AAP chapter programs are expected to vary considerably. Possible facilities might include hospital outpatient departments, established health units or renovated facilities.

Staff at each program site will likely consist of physicians readily available from a physician pool, nurse practitioners, nurses and support personnel.

The administrative responsibility for each program will rest with the individual academy chapter or similar non-profit physician group working with the guidance of a consumer-professional board of directors.

To the maximum extent possible, the programs will encourage and provide training in the areas of allied health manpower for individuals within the target population.

The financial base for all approved programs will consist of start-up monies from the AAP, and fee-for-service charges, or capitation fee for each enrollee.

It is anticipated that most enrollees will be eligible for Title XIX assistance. Efforts will also be made to secure waivers to allow prepayment programs to be developed.

Plans call for each program to be self-supporting after three years of federal assistance.

To determine the effectiveness of chapter programs, the academy will compare the health status of participants at various age levels prior to enrollment and 12 months after enrollment with the health status of matched control populations.

The academy and the Office of Economic Opportunity will further develop a systematic evaluation of this program to determine such results as the effect of the program in meeting the health needs and changing the health characteristics of the target population.

The new AAP-OEO grant was initiated and developed by the academy's Department of Community Services. Mrs. Enid R. Jones has been named program director for the AAP-OEO program in the Department of Community Services.

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named it,
put it in your hands.

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the discoverer's brand
Pyopen®*
(disodium carbenicillin)

*vials for injection equivalent to 1 gm.
and 5 gm. of carbenicillin.

BMP

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Allied Health School Changes Name

The former University of Mississippi School of Allied Health is now the School of Health Related Professions, according to Dean Thomas E. Freeland.

The name change came at the August meeting of the Board of Trustees, Mississippi Institutions of Higher Learning.

Changed on Dr. Freeland's recommendation, the new name is more representative of the programs and professions the school embraces, more acceptable to various accrediting bodies and potential faculty and more meaningful nationally.

Top Health Planners Set December Parley

The nation's health planning experts will meet in San Diego Dec. 5-7, 1972, to wrestle with organization and financial problems which have developed since passage of federal "partnership for health" legislation in 1966.

A conference theme of "Health Planning at the Crossroads: Time for Decisions," will be developed at the second annual meeting of the American Association for Comprehensive Health Planning (AACHP), according to the planning committee chairman, Dr. Saleem A. Farag, chief of California's comprehensive health planning program. Organized last year in New Orleans, the AACHP represents more than 200 state and local comprehensive health planning agencies. President is William Ready of Meridian, Miss.

Dr. Farag said a working conference is planned, including presentation of position papers by national health care authorities who will be requested "to provoke serious soul-searching and to create healthy controversy."

"The time for crucial decisions on health planning already is upon us," Dr. Farag said.

"Arguments for various national health care systems are heating up. Comprehensive health planning was intended by Congress to exert leadership in identifying health priorities established by a consensus of consumers and providers. We will be derelict in our mandated responsibilities if we do not speak out now for a system of rational health planning accepted and supported by the public."

Between 600 and 1,000 persons are expected to attend conference sessions in the Royal Inn at the Wharf on San Diego's waterfront. Local arrangements for the conference are in charge of Richard Jacobsen, executive director of the Comprehensive Health Planning Association of Imperial, Riverside, and San Diego counties.

SBH Studies Reye's Syndrome

Scattered cases of Reye's Syndrome have been reported to the Mississippi State Board of Health over the past several months, according to Dr. Durward Blakey, director, Division of Preventable Disease Control. Reye's Syndrome or acute encephalopathy with fatty degeneration of the viscera, is a poorly understood entity whose true incidence is largely unknown. It has been suggested that the syndrome is somehow related to recent viral infections.

The Center for Disease Control is interested in trying to document this relationship. The Division of Preventable Disease Control would be interested in hearing of any cases of Reye's Syndrome, especially those who give a history of a recent viral-like infection and have a clinical picture compatible with Reye's Syndrome.

If serum for viral serologic studies and specimens for virus culture or isolation can be obtained on any such patients (both of which should be promptly frozen), the Division of Preventable Disease Control will actively assist in getting the specimens processed and the results returned to the involved physicians.

Galveston Hosts Pediatrics Course

The 22nd Annual Postgraduate Course in Pediatrics of the University of Texas Medical Branch will be held in Galveston, Mar. 15-16, 1973. The course will emphasize "Problems of Office Pediatrics" with guest lecturers Drs. Victor C. Vaughan, III, and John B. Reinhart.

This program is acceptable for 12 prescribed hours by the American Academy of General Practice and registration fee will be $75.00. Further information will be furnished by Dr. Lillian H. Lockhart, chairman, Pediatric Postgraduate Committee, the University of Texas Medical Branch, Galveston, Tex. 77550.

Provocative Allergy Course Scheduled

A practical course in the technique of intradermal provocative food testing and food injection therapy will be offered Saturday and Sunday, Mar. 10-11, 1973, at the Admiral Semmes Hotel, P. O. Box 1209, Mobile, Ala. 36601.

The course will also cover inhalants, chemicals, drugs, fungi, yeasts, viruses, hormones, terpenes, air-pollutants, insects, and contact dermatitis.

The registration fee of $125.00 also covers one dinner and two luncheons. To register for the course send name, address, and check (payable to Provocative Allergy Course) to: Dr. Joseph B. Miller, 3 Office Park, Suite 110, Mobile, Ala. 36609.

Room reservations should be made directly with the hotel.

APPG Toxic Psychosis Reported by MSBH

Acute, transient toxic psychosis following injection of aqueous procaine penicillin G (APPG) has been described in the literature and, more recently, seen in our clinics, reported Dr. Durward Blakey, director of the division of Preventable Disease Control of the State Board of Health. The phenomenon is not allergic in nature but is generally conceded to be caused by intravascular injection of procaine. The manner of action on the central nervous system is unknown but is transient, with no residuals. There is no contraindication to future use of APPG in such a patient.

The reaction follows immediately the intramuscular injection of APPG. Signs and symptoms include violent psychomotor activity, fear of impending death, anxiety, delirium, hallucinations, visual disturbances and disorientation. Paresthesia, aphasia and dysphagia have been reported. Hyperventilation, rapid pulse and increased blood pressure are characteristic.

Therapy, other than restraint of patient, is probably not necessary, said Dr. Blakey. The major component is usually over in a matter of minutes so that patients given phenobarbital possibly did not react any more rapidly than those who did not receive it.



Prescribe
the discoverer's brand
Totacillin®*
(ampicillin trihydrate)

*capsules equivalent to 250 mg. and 500 mg. ampicillin, for oral suspension equivalent to 125 mg./5 cc and 250 mg./5 cc. ampicillin

BMP

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Football Injury Program Held in Gulfport

The fifth annual Football Injury Performance conference was held Aug. 7 at Memorial Hospital in Gulfport, under the auspices of the American College of Surgeons.

Dr. A. C. Hewes of Gulfport was director of the course which was attended by over 60 area coaches and physicians.

Dr. Richard Buckley discussed dangers associated with head injuries, and Dr. M. S. Corban talked about safeguards in treatment of fractures.

Differentiation of heat stroke and heat exhaustion was given by Dr. E. H. Crane. Dr. John E. Williams discussed pre-season conditioning.

"Doc" Knight, Ole Miss trainer, and Dr. Ferrell Varner, team physician, concluded with a presentation on handling injuries on the field.

Dr. Ray Wesson served as moderator for the discussion period.

Tupelo Center Is Funded

A $56,432 grant for the Regional Evaluation and Training Center in Tupelo has been approved by the Appalachian Regional Commission. The total program budget is $247,412, with Title IV-A funds supplying $181,921 and the remainder coming from local sources.

John A. Rasberry, executive director of the Region 3 MH/MR Commission which will adminster the program, said the funds will be used for staffing and operation.

Rasberry said the center will offer short-term residential services, primarily for children ages four through ten exhibiting mental retardation, cerebral palsy, epilepsy, behavior disorders and multiple handicaps. The program will provide diagnostic and evaluation services, medical treatment services, crisis assistance, follow-up services, psychological services, social services, volunteer services, intensive parent education and individual prescriptive instruction.

The building which will serve as headquarters for the program is located on a ten-acre plot of land donated by the city of Tupelo. The buildings have approximately 16,000 square feet of floor space.

The staff will include a center director, assistant director-educator, special education teacher, social worker, pediatricians, psychologists, registered nurse, licensed practical nurses, teacher aides, recreational therapist, nutritionist, house parents, cooks, housekeepers and maintenance personnel.

Mental Health Programs Seek State Assistance

The Mississippi Interagency Commission on Mental Illness and Mental Retardation has asked the State Budget Commission for $500,000 for direct state assistance to regional mental health and mental retardation centers in fiscal year 1973-74, according to Dr. Dorothy Moore, program director of the Interagency Commission.

This represents a new approach because no state funds have been made available to community centers since the regional MH-MR program effort officially began with the establishment of the M.I.C. by the legislature on July 1, 1966.

During the six years since that date, all financial support of the programs (except the annual state allocation for support of the M.I.C. staff) has come from federal and local sources, with county boards of supervisors matching federal funds.

In 10 of the 16 MH-MR planning regions, this kind of local support has demonstrated grassroots interest in the program and has resulted in at-home services to the mentally ill and retarded not previously available, plus an unprecedented influx of professional personnel throughout the state.

The M.I.C. is asking that the state of Mississippi, through its legislature, become a partner in the program, share the financial load with the counties, and provide stimulation for areas without an MH-MR program to start planning for one. The $500,000 requested for fiscal year 1974 (beginning July 1, 1973) would be earmarked for (1) grants to match local tax funds going to regional MH-MR commissions to support operating centers and (2) smaller grants to stimulate planning for new MH-MR centers in regions which do not yet have programs.

This money would (1) encourage community efforts on behalf of the mentally ill and mentally retarded, (2) strengthen existing programs by allowing needed expansion, and (3) stimulate the more rapid development of new programs in regions without these services. State monies granted to a region would have a multiplying effect in that this new financial input could be used by the regional programs for matching federal funds available.

UMC Has Freshman Class of 116

A 116-student freshman class entered the University of Mississippi School of Medicine in September, according to Dr. Robert E. Blount, dean.

The increase of 16 students over last year's entering class was permitted through increased state appropriations and additional grant monies, Dr. Blount said. The expansion, the fifth since the school moved to the Jackson campus, is the largest in the school's history.

Coast Med Center Is Under Construction

Ground has been broken for a $7½ million 244-bed hospital, the Coastal Medical Center, in Gulfport.

Administrative director Dr. Harry M. Clark of Ocean Springs said the center has entered into an agreement with National Hygienics, a Los Angeles-based national hospital chain.

National Hygienics will own, operate and construct the hospital, which will employ about 400 persons and should take 18 months to two years to be constructed.

The facility will have two base floors which will house all the administrative and ancillary services and a three-story nursing tower which will contain the beds.

"We feel the construction of this hospital is significant for several reasons," said Dr. Clark. "The overpopulation in other hospitals coupled with the tremendous migration to the Gulf Coast certainly justifies another hospital."

"Also, we feel the uniqueness of a comprehensive medical center which we have coined Medi-Plex and which will eventually encompass all aspects of medical treatment, is a rather new and exciting concept in the South," he added.

The medical center plans to offer such services as semi-automated multi-phasic physical examinations and will be initially staffed by 22 physicians.

The hospital will provide services in obstetrics and gynecology, surgery, physical therapy, rehabilitation, pulmonary function with inhalation therapy, pediatrics, ICU and CCU, chemotherapy, blood bank and burn treatment and therapy.

A long-range projected service is a cardiac catheterization laboratory with radiology and nuclear medicine facilities, Dr. Clark noted.

He said the first phase of the project will last five years and involves $15 million. He projected that 15 years from now the outpatient clinic will have 75-100 doctors and the hospital will have 400 beds.



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Pesticides May Be Linked to Impotency

A West Virginia University research team has demonstrated what they feel is a possible link between pesticide residuals in animals and hormonal imbalance which may lead to impotency, according to the National Society for Medical Research.

Dr. John A. Thomas, professor of pharmacology in the WVU School of Medicine, reported that pesticides such as malathion, parathion and carbaryl are administered to various species and traced by the use of radioactive particles. High amounts of the pesticides were found in various male organs of reproduction. DDT, for instance, suppressed some metabolic functions of the prostate gland. Large amounts of DDT were also found in the testes and seminal plasma.

Although these pesticide residuals are found in the male reproductive system, there has not yet been any conclusive proof that genetic damage or irreversible sterility may be caused by such compounds.

Pesticide residues have been blamed for causing impotence among some farm workers in England, and suspected of contributing to the increased incidence of fetal abnormalities in laboratory animals. Dr. Thomas feels that such abnormalities in animals may be caused by altered hormonal levels in the female, altered seminal fluid or sperm in the male or a combination of these factors.

Insecticides have also been blamed for the hormonal imbalance in female birds which seems to result in thin egg shells. The weakened shells cannot withstand incubation, and this weakness is believed by many experts to be partly responsible for the near extinction of many species, including the bald eagle.

AMA Publishes Allied Med Education Directory

A total of 2,524 different programs to train allied medical personnel in 18 different occupations are listed in a new reference guide published by the American Medical Association.

The guide was published as a part of the AMA's ongoing program to increase the nation's supply of allied health personnel to work with the physician as a part of the health care team.

The 1972 Allied Medical Education Directory provides a description of each of the 18 allied medical occupations for which the Council on Medical Education approves educational programs, an explanation of the approval process, and an occupational listing of AMA-approved programs.

The programs listed were approved as of July 1, 1971, by the Council on Medical Education of the American Medical Association and 14 collaborating organizations.

The directory also lists selected national organizations concerned with allied medicine and information on state organizations and agencies specifically concerned with allied medical education.

SBH Now Tests Baby Turtles

"The State Board of Health has begun testing and certifying baby turtles for interstate shipment in conformity with regulations proposed by the Food and Drug Administration," says Dr. Hugh B. Cottrell, State Health Officer.

According to Dr. Durward Blakey, director, Preventable Disease Control Division, State Board of Health, the first shipment of baby turtles was certified last month. He explained that the procedure for certification "is simple and quite worthwhile when one realizes the severe complications that can arise from a diseased shipment."

Dr. Blakey was referring to recent health articles which cited the possible spread of Salmonella infections from pet turtles.

The certification procedure begins with a request from the shipper for a SBH representative to take samples from the lot of turtles. "After lab analysis, if the turtles are found to be disease free," continued Dr. Blakey, "our representative notifies the shipper and appropriate State Board of Health seals are placed on the containers." The final stage consists of sending a notice with pertinent data about the shipment to the state health officer of the receiving state.

The fee for testing is $50.00 per lot, and according to Dr. Cottrell, "we're finding that most shippers are eager for this service since the pet turtle industry is a growing one in the state."

Anyone interested in this testing should contact the Mississippi State Board of Health, Preventable Disease Control Division, P. O. Box 1700, Jackson 39205.



rheumatoid arthritic blowup...

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Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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For complete details, including dosage, please see full prescribing information.

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a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® Tablets, brand of pentazocine (as hydrochloride), can be compared to codeine in analgesic efficacy, Talwin is not subject to narcotic controls. Patients receiving Talwin Tablets for prolonged periods face fewer of the consequences you've come to expect with meperidine or codeine. And that, in the long run, can mean a better outlook for your chronic-pain patient.

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- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe – day or night – even by phone.
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50 mg. Tablets

Talwin®

brand of

pentazocine (as hy

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used wi caution in patients about to undergo surgery of the biliary tra

Patients Receiving Narcotics. Talwin is a mild narcotic antagoni Some patients previously receiving narcotics have experienced mi withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administer to patients prone to seizures; seizures have occurred in a few su patients in association with the use of Talwin although no cause a effect relationship has been established.

Adverse Reactions: Reactions reported after oral administrati of Talwin include *gastrointestinal:* nausea, vomiting; infrequent constipation; and rarely abdominal distress, anorexia, diarrhe *CNS effects:* dizziness, lightheadedness, sedation, euphoria, hea ache; infrequently weakness, disturbed dreams, insomnia, syncop visual blurring and focusing difficulty, hallucinations (see *Acu CNS Manifestations* under WARNINGS); and rarely tremor, irr tability, excitement, tinnitus. *Autonomic:* sweating; infrequent flushing; and rarely chills. *Allergic:* infrequently rash; and rarel urticaria, edema of the face. *Cardiovascular:* infrequently decrea in blood pressure, tachycardia. *Other:* rarely respiratory depressio urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose 1 tablet (50 mg.) every three or four hours. This may be increas to 2 tablets (100 mg.) when needed. Total daily dosage should n exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in add tion to analgesia, aspirin can be administered concomitantly wit Talwin.

Children Under 12 Years of Age. Since clinical experience in chi dren under 12 years of age is limited, administration of Talwin this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have receiv Talwin orally for prolonged periods have not experienced wit drawal symptoms even when administration was abruptly disco tinued (see WARNINGS). No tolerance to the analgesic effect h been observed. Laboratory tests of blood and urine and of liver an kidney function have revealed no significant abnormalities afte prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin ove dosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and oth supportive measures should be employed as indicated. Assisted controlled ventilation should also be considered. Although nalo phine and levallorphan are *not* effective antidotes for respirato depression due to overdosage or unusual sensitivity to Talwin, pa enteral naloxone (Narcan®, available through Endo Laboratories) a specific and effective antagonist. If naloxone is not available, pa enteral administration of the analeptic, methylphenidate (Ritalin® may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

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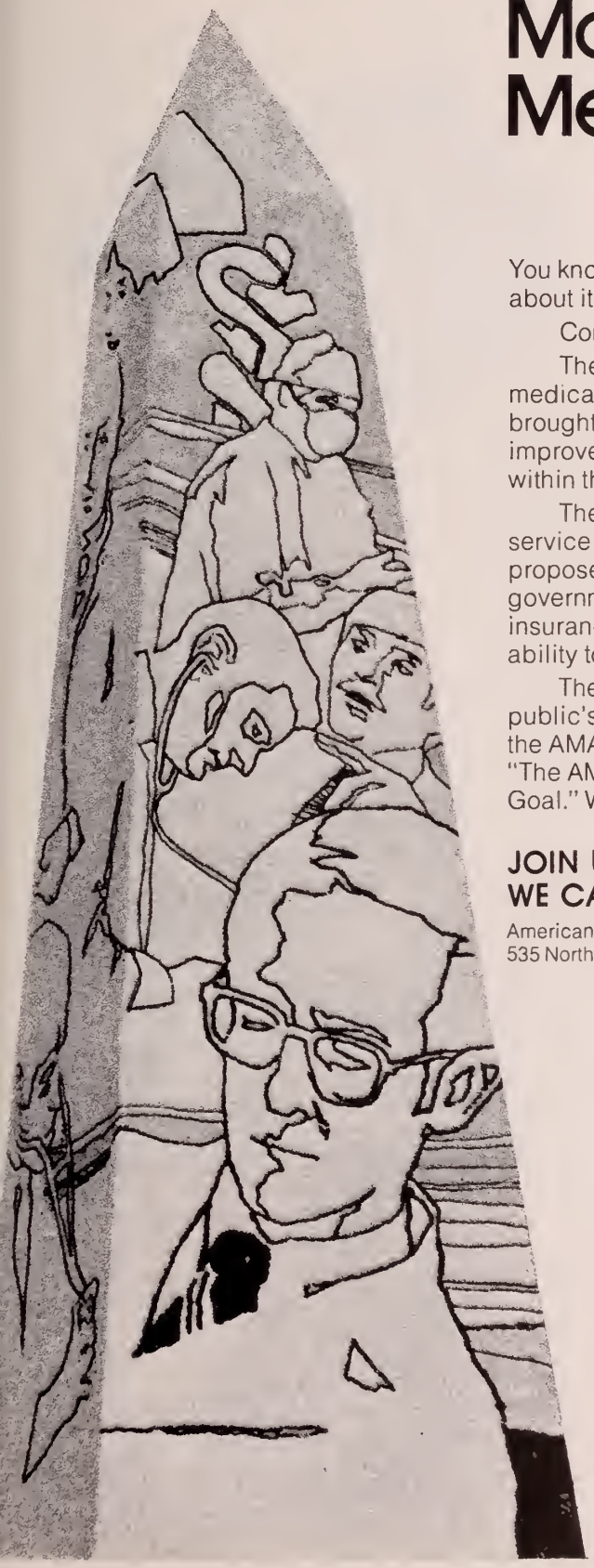
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Fertility Society Announces Course

The American Fertility Society announces a special regional postgraduate program, the Evaluation and Treatment of the Infertile Couple, Sunday, Nov. 12, 1972, at the New Orleans Marriott Hotel.

This program is designed for the generalist and internist to allow him to be comfortable in discussing problems of infertility with his patients.

The material presented will outline a basic approach to the investigation of major causes of infertility and management of these problems. Emphasis will be on the couple, and therefore, the management of the male will be included. The specific diagnostic and therapeutic techniques to be reviewed include management of male infertility, ovulational problems, tubal problems, and cervical problems.

A syllabus has been prepared for the postgraduate course and this will be sent in advance to each registrant so that he may review the material before the date of the course. The material will be presented in a planned fashion by a faculty chosen from members of the society who have expertise in this field. A special presentation for the luncheon meeting has been planned at which time a film on the "Mechanisms of Ovulation" will be shown by Dr. Richard J. Blandau.

The registration fee for this program is $75.00 which includes the syllabus and luncheon on the day of the course. Registration is limited, so early pre-registration is urged. Pre-registration requests or requests for additional information should be directed to: Dr. Herbert H. Thomas, Medical Director, 1801 Ninth Avenue South, Birmingham, Ala. 35205.

Child Care Advisory Board Meets

The Child Care Advisory Board which was set up to review child care facility requirements met last month at the State Board of Health building in Jackson, with Dr. Hugh B. Cottrell, State Health Officer, present.

According to Dr. Cottrell, the ten-member board discussed in detail the regulations and plans proposed for implementation.

The State Board of Health was designated by the Legislature to license child care centers in the state and "much study, preparation and work with other concerned organizations have gone into the compiling of these standards," said Julius Alsobrooks, supervisor of Child Care Services. He also added that Mississippi's regulations on child care "compare very favorably with other states in this section of the country. No one in the state has been denied a license thus far—approximately 300 licenses have been issued."

Making up the advisory board are Mrs. Merle Crumpton, Miss. Association for Children Under Six; Dr. Frances McGuffee, Miss. Home Economics Association; Mrs. Joyce Dortch, Governor's Committee on Children and Youth; Dr. Peggy Emerson, Department of Child Development, University of Mississippi; Charles Graham, State Department of Welfare; Walter Hester, State Fire Marshall; Wallace Merrill, State Department of Education; Dr. Margaret Batson, Department of Pediatrics, University Medical Center; Dr. George T. Kimbrough of Hattiesburg, Miss. State Medical Association; and Donnie Berryhill of Gulfport, who is a member from the state-at-large.

A copy of the child care facility regulations is available at local health departments for anyone interested in opening such a facility. The Board of Health should then be contacted for an application for license, according to Alsobrooks.

Requests for applications should be addressed to Miss. State Board of Health Child Care Services Unit, P. O. Box 1700, Jackson, 39205.

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Index to Advertisers

American Medical Association 438B, 459

Beecham-Massengill Pharmaceuticals 453, 455, 457
Burroughs Wellcome and Company **8**

Geigy Pharmaceuticals **10, 10A,** 458A

Hill Crest Hospital **11**

Kay Surgical **19**

Eli Lilly and Company **18B,** 418A, 418B, **front cover**

Merck, Sharp and Dohme 446, 446A
MSMA **12**

National Health Service Corps **11, 19**

Pharmaceutical Manufacturers Association 426A, 426B, 426C
Wm. P. Poythress and Co. 434B

Reed and Carnrick **10B**
A. H. Robins Company 442A, 442B, 442C
Roche Laboratories **second cover,**
3, 6, 7, 14, 15, 18, 18A, 449, 450, 451, **fourth cover**
J. B. Roerig and Company **16, 17,** 446B, 447

G. D. Searle and Co. 430B, 430C, 430D
Smith Kline and French 430A
St. Dominic Hospital 460
Stuart Pharmaceuticals 426D

The Upjohn Company 434A, 442D, 442E, 442F

Winthrop Labs 438A, 458B, 458C, 458D
Woodward Academy **11**

Thomas Yates and Company third cover

IN CONCLUSION

HEW would be authorized to disclose publicly names of physicians, hospitals and other providers who abuse the Medicare program under proposed regulations issued by HEW. Public disclosure would be applicable to those providers deemed to have followed a pattern of providing excessive services and to those federally convicted of submitting fraudulent Medicare claims. Consumer groups lobbied unsuccessfully for disclosure of MDs receiving more than $25,000 annual

Republican Party adopted health plank calling for mandated employer health insurance plans providing minimum benefits to all, but opposed "nationalized compulsory health insurance." A sweeping program of mandatory NHI coverage "would at least triple in taxes the amount the average citizen now pays for health and would deny families the right to choose the kind of care they prefer," the GOP stated and recommended continued reliance on a pluralistic approach.

FDA has proposed that certain preparations containing limited amounts of morphine, codeine, dihydrocodeine and ethylmorphine be restricted to prescription. Proposal would revoke regulation exempting products from prescription dispensing requirements of food, drug and cosmetic act. Action results from Bureau of Narcotics and Dangerous Drugs survey demonstrating abuse of exempt narcotic-containing cough preparations. Interested parties have until Nov. 11 to comment.

According to Congressional Quarterly, Common Cause, a reform group which has labeled itself "the people's lobby" was the biggest spender in Washington last year. Common Cause reported spending $847,000 and was major lobbying unit responsible for passage of Federal Election Campaign Act of 1971. Other big spenders were Veterans of World War American Postal Workers Union, AFL-CIO, and American Farm Bureau. AMA ranked 11th, spending $114,800.

Scientists at Collaborative Research, Inc., Waltham, Mass., have discovered a way to detect LSD in human blood and urine which will help physicians treat patients suffering from the drug's hallucinogenic effects and facilitate further research. New method uses radioactivity-tagged LSD and LSD antibodies produced in rabbits. LSD in human samples is attracted to the antibodies, as is the tagged LSD, and the two are measured from radioactive flashings.

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Recently announced, a large insurance group intends to offer an optional skyjacking supplement to its short-term travel accident policies.

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(chlordiazepoxide HCl)

5-mg, 10-mg, 25-mg capsules
up to 100 mg daily in severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased or decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during prolonged therapy.
Supplied: Librium® capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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Nutley N J 07110

OURNAL

OF THE Mississippi

TATE MEDICAL ASSOCIATION

NOVEMBER 1972

One of the familiar line of
Cordran® products
Flurandrenolide

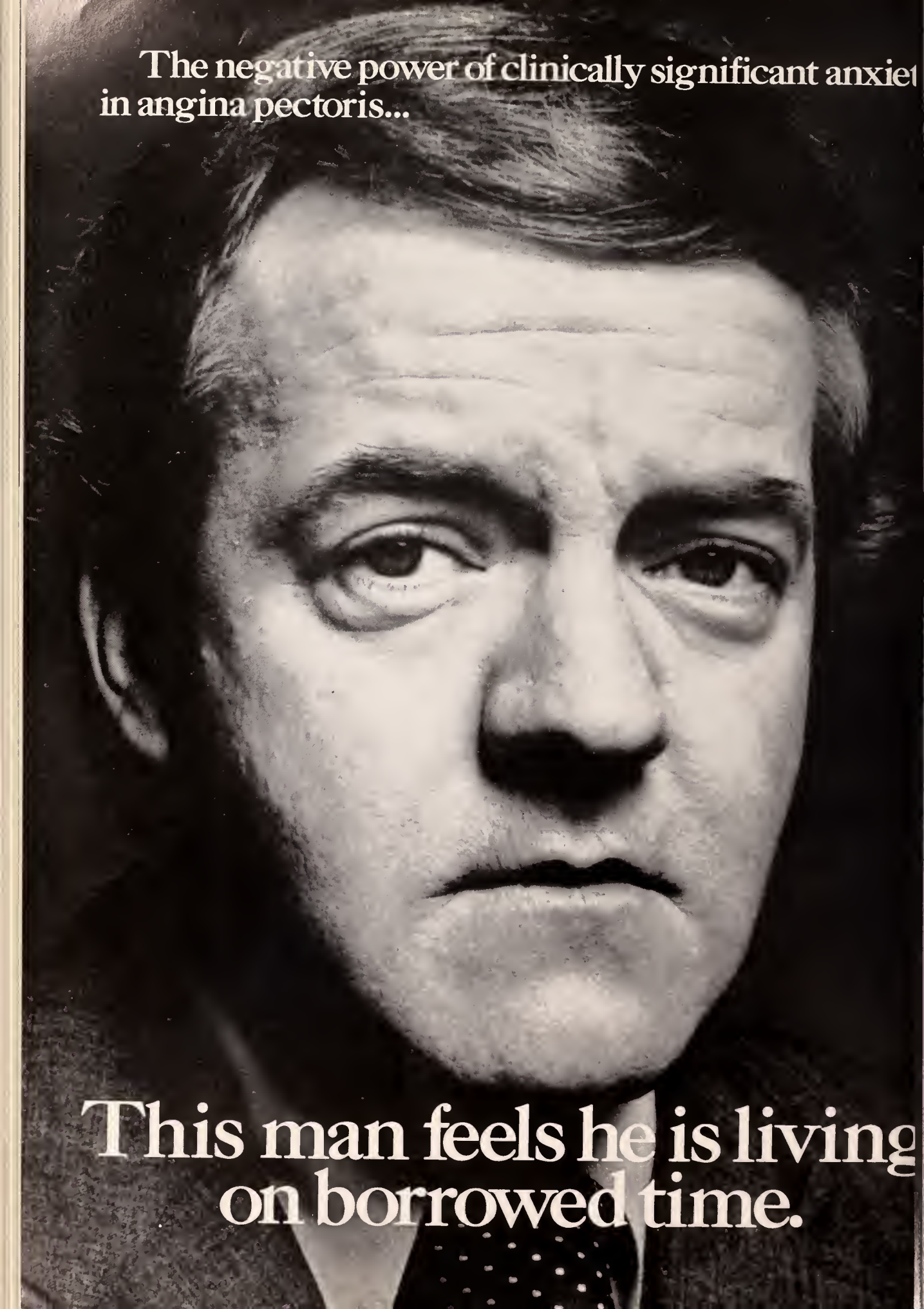


Lilly
Eli Lilly and Company
Indianapolis, Indiana 46206

Additional information available to the profession on request.

This Month . . . Aggressive Management of Pelvic Abscess, Chondrosarcoma of the Mandible




The negative power of clinically significant anxiet
in angina pectoris...
This man feels he is living
on borrowed time.

During anginal attacks, patients may suffer intense apprehension. More frequently, however, they experience a continuing sense of less severe but nonetheless disproportionate anxiety.

Reduction of such clinically significant anxiety is important, since undue emotional stress may precipitate further anginal episodes.

Adjunctive Librium (chlordiazepoxide HCl) may be especially suitable for relief of clinically significant anxiety and emotional tension in anginal patients because of its generally prompt therapeutic effectiveness and wide margin of safety. In a recent double-blind randomized study,* Librium (chlordiazepoxide HCl) was administered for relief of moderate anxiety in 20 anginal patients seen in office practice over a 20-week period. Symptoms of emotional distress related to anxiety were rated at base-line, one week, two weeks and monthly thereafter. Relief was obtained notably early in therapy. The clinical results demonstrated that Librium offers the coronary patient an antianxiety drug that, in the author's opinion, is both effective and safe. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. (See summary of prescribing information.)

Librium (chlordiazepoxide HCl) is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics and antihypertensive agents, whenever anxiety is clinically significant. The drug should be discontinued after anxiety has been reduced to appropriate levels.

The positive power of adjunctive Librium® (chlordiazepoxide HCl)

10-mg, 25-mg capsules up to 100 mg daily

for moderate to severe anxiety accompanying angina pectoris

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

*Levine, S.: "Angina Pectoris and Emotional Overlay," Scientific Exhibit presented at the Annual Meeting of the Maine Medical Association, Kennebunkport, Me., June 13-15, 1971.

A copy of the Levine study may be obtained from your Roche representative.

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The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10, but when justified to the Editors, additional references will be considered for publication. Each will be critically examined, and only valid, primary references will be published. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus,* volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made after proof sheets are received by the JOURNAL.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text.

Reprints may be obtained at cost plus shipping charges from the association and should be ordered prior to publication. The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. —*The Editors.*

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JOURNAL of the Mississippi
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CONTENTS

ORIGINAL PAPERS

The Aggressive Management of Pelvic Abscess **461** Alan L. Kaplan, M.D., and Warren Jacob, M.D., Houston, Tex.

Chondrosarcoma of the Mandible **465** Robert T. Love, Jr., M.D., Greenville, Miss.

SPECIAL ARTICLE

Mediphone: Physicians Saving Lives by Telephone **468** John G. Bellows, M.D., Chicago, Ill.

EDITORIALS

PSRO Is Enacted **471** Charles L. Mathews, Executive Secretary, MSMA

Learning Disabilities—The New Problem **472** Peter R. D'Alena, M.D., San Jose, Calif.

THIS MONTH

The President Speaking **470** "A Comparison of Two Viewpoints"

Medical Organization **481** Association of Medical Clinics Taps Four Mississippi Clinics

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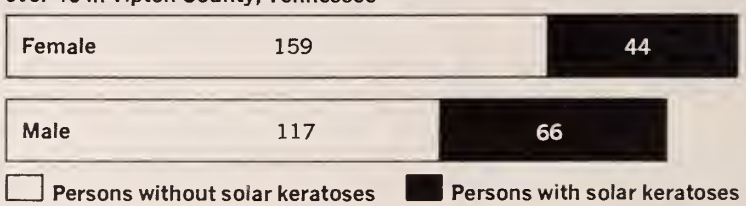
What it means to live and work i Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



Solar, actinic, senile keratoses

Called by many names, the typical lesion is flat or slightly elevated, brownish or reddish in color, papular, dry, adherent, rough, sharply defined; usually multiple lesions, chiefly on exposed portions of the skin.

Sequence/selectivity of response

Erythema in areas of lesions may begin after several days of therapy; height of reaction (only in affected areas)* usually occurs within two weeks, declining after discontinuation of therapy. Since this response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

Cosmetic results

Cosmetic results are highly favorable. Incidence of scarring is low—important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

5% cream–a Roche exclusive

Only Roche formulates the 5% cream... high in patient acceptability... high in clinical efficacy, especially for lesions of hands and forearms... economical.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

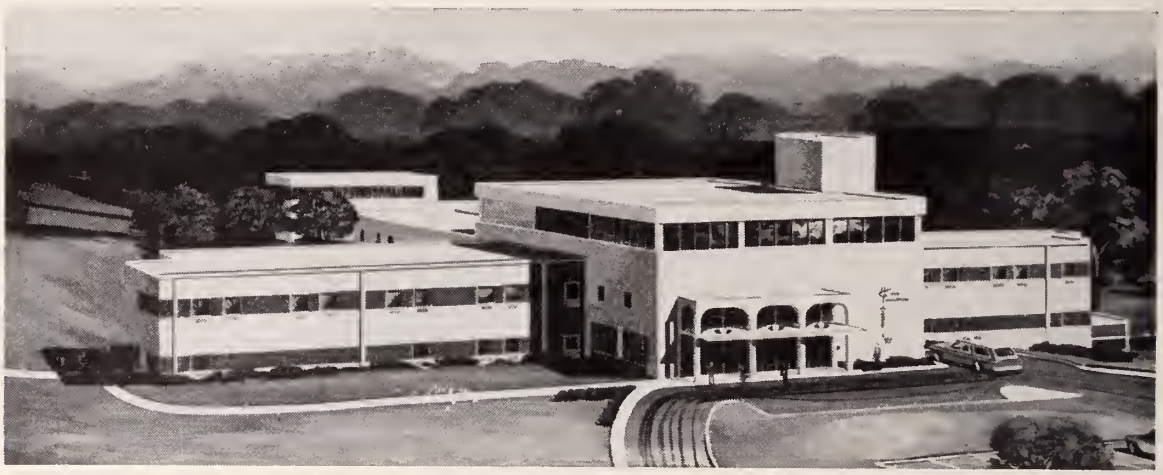
an alternative to conventional therapy

Efudex®
(fluorouracil)
cream/solution

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For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

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NEWSLETTER

November 1972

ear Doctor:

ealth care is barely luke warm as an election issue, according to wo polls reported by AMPAC. The GOP Platform Committee ascertained hat only 20% of the 7850 individuals responding rated increased health are as a "very important issue," 34% rated it "somewhat important," nd 37% "not very important." Four major issues listed were crime, in- ation, welfare reform, and curbing federal spending.

In another poll, individuals were asked to rank the four listed health problems in order of their seriousness. Ranked first was quality of health care and then inadequate health insurance coverage, accessibility of doctors, and the cost of health care.

MA Council on Long Range Planning and Development has scheduled an pen hearing at the AMA Clinical Convention in Cincinnati at the etherland Hilton Hotel on Nov. 27. Each witness is urged to submit written statement in advance. Topics include AMA reorganization, ommittee and council responsibilities and constitutional changes.

nicide rates among males in the U.S. and Canada have risen sharply at ges under 45 but have declined at ages 45 and older, according to etropolitan Life's Statistical Bulletin. Suicide rates among U.S. emales have risen even more sharply than for males at ages under 65. espite increases, U.S. is low compared to most West European nations.

nited States Pharmacopeial Convention has published the 10th edition f United States Adopted Names (USAN), combined with the new USP ctionary of Drug Names (USP-DDN). Issued to provide a single alpha- etical list of names for both marketed and investigational drugs, the ook contains 5,055 entries, cross-references, cross index, and costs $15.

me California banks are trying to eliminate payroll checks and replace em with an automated payment and deposit system which routes authorized eposits and payments through automated clearinghouses in Los Angeles d San Francisco. Benefits are elimination of theft and forgery, me-consuming trips to bank, and paper handling.

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor

DBI® phenformin HCl Tablets of 25 mg.
DBI-TD® phenformin HCl Timed-Disintegration Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.
Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoxemia.
Warnings: Use during pregnancy is to be avo
Precautions: 1. *Starvation Ketosis:* This mus differentiated from "insulin lack" ketosis an characterized by ketonuria which, in spite of tively normal blood and urine sugar, may re from excessive phenformin therapy, excessiv insulin reduction, or insufficient carbohy- drate intake. Adjust insulin dosage, lower ph formin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin witho first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recomme

Why go to the islet

Let's say you've decided that diet alone won't work in your adult-onset, nonketotic diabetic.

You're considering oral therapy for a new patient. DBI-TD or a sulfonylurea. Which?

Both lower blood sugar. But here's why DBI- which is not a sulfonylurea, may b important to the dieting diabetic.

- Sulfonylureas promote release of insulin.
- Insulin is lipogenic and helps transport gluc into adipose tissue.
- Overweight patients frequently have normal or high levels of endogenous insu
- DBI-TD lowers blood sugar without stimulating insulin secretion fron the pancreas.

Usual dosage: one 50-mg. capsul with breakfast may be effective, o second capsule may be given with the evening meal.

DBI-TD® Geigy

phenformin HCl

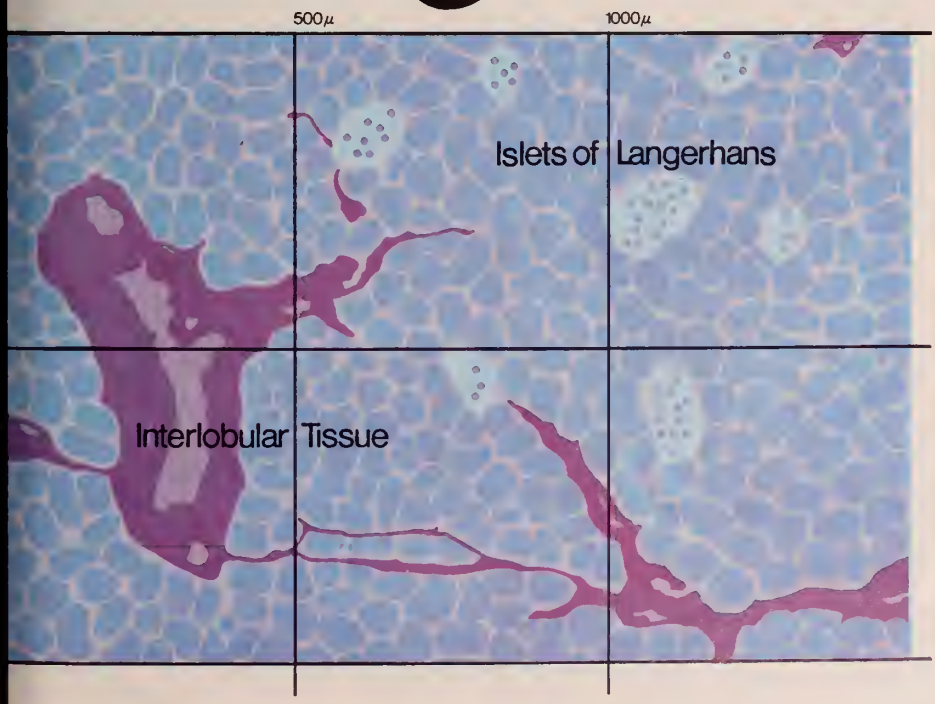
lowers blood sugar without raising blood insulin

he presence of azotemia or in any clinical
ation that predisposes to sustained hypoten-
n that could lead to lactic acidosis. To
erentiate lactic acidosis from ketoacidosis,
iodic determinations of ketones in the blood
urine should be made in diabetics previously
ilized on phenformin, or phenformin and
ulin, who have become unstable. If electrolyte
alance is suspected, periodic determinations
uld also be made of electrolytes, pH, and the
ate-pyruvate ratio. The drug should be with-
wn and insulin, when required, and other
rective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.
Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
(B) 98-146-103-D (6/72)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

of Langerhans?



Before using DBI-TD or any oral hypoglycemic, please read the prescribing information concerning dosage, warnings, contraindications, precautions and adverse reactions.



Ampicillin, Carbenicillin, Oxacillin...

IMAGINE YOUR PRACTICE WITHOUT THEM

In 1957 Beecham scientists discovered and isolated 6-APA, the penicillin nucleus that opened the way to a new generation of semi-synthetic penicillins. Over the past 14 years more than 3000 different semi-synthetic penicillins have been synthesized and evaluated by our staff. The fruits of their work are in your hands today. Others will be in your hands tomorrow.

Need we say more?

Prescribe the discoverer's brands:

Totacillin® (ampicillin trihydrate)
Pyopen® (disodium carbenicillin)
Bactocill® (sodium oxacillin)
and more to come

Beecham-Massengill Pharmaceuticals BMP
Div. of Beecham Inc. Bristol, Tennessee 37620

☐ Totacillin (ampicillin trihydrate) capsules equivalent to 250 mg. and 500 mg. ampicillin, for oral suspension equivalent to 125 mg./5 cc. and 250 mg./5 cc. ampicillin.
☐ Pyopen (disodium carbenicillin) vials for injection equivalent to 1 gm. and 5 gm. of carbenicillin.
☐ Bactocill (sodium oxacillin) capsules equivalent to 250 mg. and 500 mg. oxacillin and vials for injection equivalent to 500 mg. and 1 gm. oxacillin.

Course on Laryngology, Bronchoesophagology Set

The department of otolaryngology of the Abraham Lincoln School of Medicine and the University of Illinois Hospital Eye and Ear Infirmary, University of Illinois at the Medical Center, will conduct a continuing education course in laryngology and bronchoesophagology Mar. 5-10, 1973.

The course is limited to 15 physicians and will be under the direction of Dr. Paul H. Holinger. It will be held largely at the Eye and Ear Infirmary, 1855 West Taylor Street, Chicago, and will include visits to a number of other Chicago hospitals.

Instruction will be provided by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested physicians should write the department of otolaryngology, Eye and Ear Infirmary, 1855 West Taylor Street, Chicago, Ill. 60612.

State Med Assistant Is Certified

A record number of medical assistants have passed the 1972 certification examination conducted by the American Association of Medical Assistants (AAMA). Included in this number is a Mississippian, Mrs. Elizabeth W. Hampton of Jackson, secretary to Dr. William O. Barnett, department of surgery, the University of Mississippi Medical Center.

The new record of 304 includes 126 who passed the administrative examination, 105 who passed the clinical, and 73 who earned dual certification. The examination was passed by 280 individuals for the first time, while 24 earned certification in an additional category.

The successful applicants were honored during ceremonies at the AAMA convention in Phoenix, Oct. 17-21 and certificates and pins were presented on Oct. 18.

Jo Estrada, RN, CMA, chairman of the AAMA Certifying Board, said that of the 579 candidates who sat for the 1972 examination, over 50 per cent passed.

"All of the board members are very pleased with the results," Miss Estrada explained, "because they reflect the great emphasis being placed on examination preparation by medical assistants throughout the country. To better prepare the candidates, many more local chapters are conducting long-term study programs and many state conventions are offering simulated examinations called mini-tests. In addition medical assistants who are already certified are making their experience and expertise available to those who are studying."

Miss Estrada commented that the examination is now geared to practical application and is more relevant to the medical assistant's work experience.

Invitation to Scientific Exhibitors

105TH ANNUAL SESSION
APRIL 30-MAY 3, 1973
SHERATON-BILOXI

Prospective scientific exhibitors are invited to submit applications to MSMA, Box 5207, Jackson, Miss. 39216. Exhibitors are asked to give title of exhibit, authors and amount of wall space required. Exhibits will be open May 1-3 and may be erected Sunday or Monday, April 29-30.

The Aesculapius Award will be presented to the association member or members having the best scientific exhibit.

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 26-29, 1972, Cincinnati. Annual Convention, June 24-28, 1973, New York City. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi Academy of Family Physicians, Annual Meeting, July 12-14, 1973, Biloxi. Mrs. Alyce Palmore, Executive Secretary, P.O. Box 12330, Jackson 39211.

Mississippi State Medical Association, 105th Annual Session, April 30-May 3, 1973, Biloxi. Charles L. Mathews, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, The Field Clinic, Centreville 39631, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson 39201, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, P.O. Box 147, Port Gibson 39150, Secretary.

Clarksdale and Six Counties Medical Society, First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale 38614, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport 39501, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando 38632, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian 39301, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez 39120, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington 39095, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc 38863, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford 38655, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune 39466, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main St., Columbus 39701, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula 39567, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb 39648, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie St., Hattiesburg 39401, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, The Street Clinic, Vicksburg 39180, Secretary.

DATELINE

llinois Rules on utopsy Permission

Chicago, Ill. - An Illinois circuit court decision has declared unconstitutional a section of Illinois law which gives hospitals right to perform an autopsy with ermission of one family member. Court did not specify how many relatives ust give permission, what time limit for contacting relatives should be, r what priorities should be established among classes of surviving relatives. hicago Medical Society condemned decision.

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ixon Supports x Price Posting

New Orleans, La. - Virginia Knauer, president's Special Assistant for Consumer Affairs, reconfirmed Administration's position that prescription drug price information hould be available to consumers and that state pharmacy legislation prohibiting pharmacies from publishing Rx prices should be changed. In talk o National Association of Chain Drug Stores, she said restrictions hamper rice competition and deny consumer a choice.

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ospital Guides ssued by AMA

Chicago, Ill. - American Hospital Association Board of Trustees has issued guidelines for governance of hospitals and other health care institutions. Guidelines contain uggested methods for involvement of governing board, administration and edical staff in program determination, policy formulation and coordinated peration of institutions. Document suggests it is responsibility of institution to meet health care needs of community.

MA Loans Ease lood's Effects

Chicago, Ill. - AMA has invested nearly a quarter of a million dollars in restoring medical stability to areas of Pennsylvania ravaged last June by tropical storm gnes. The money has been made available in interest-free loans to help hysicians hardest hit by storm and flooding to re-establish medical service o their patients. Pennsylvania Medical Society also made loans and estimated that some 250 physicians suffered heavy losses.

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mericans Diagnose, reat Themselves

Washington, D.C. - Food and Drug Administration has released study showing that many Americans attempt to diagnose and treat their own ailments, without consulting a physician, for prolonged periods. "This trial and error approach to olving personal health problems is the major underlying cause of questionble health practices in the U.S. population, "said FDA. Some 2,839 adults eported they would self-medicate for two weeks before seeing a doctor.

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Gerard Lambert Award Winners Announced

The board of directors of the Gerard B. Lambert Awards for innovative ideas that improve patient care and/or reduce costs has announced the 1972 winners.

The first award went to Methodist Hospital of Indiana at Indianapolis for "prospective medicine and health hazards appraisal." Second place was won by the Wisconsin Regional Medical Program for "nurse utilization: a patient care system."

Memorial Hospital Medical Center of Long Beach, Cal., took third place honors as the first community health facility to open a 24-hour pharmaceutical information "hotline" service.

The awards committee's purpose is to spread the word about innovative ideas proved to be successful in order to motivate others within the health care industry to implement these ideas and to encourage them to try other innovative approaches. The research analysts search for ideas rather than persons or institutions.

The Gerard B. Lambert Awards were established in 1971 by Mrs. Lambert to memorialize her late husband, an innovator in government, business, housing and other fields.

For more information write: The Gerard B. Lambert Awards, 53 Bank Street, Princeton, N. J. 08540.

FDA Calls for X-ray Filters

A Food and Drug Administration recommendation to state radiation control program directors calls for the use of protective filters with all breast x-ray examination equipment to prevent erythema.

The recommendation is aimed specifically at equipment now using x-ray tubes with beryllium windows without the filtration usually employed in other types of diagnostic x-ray machines. The FDA said that its Bureau of Radiological Health has received reports that the use of unfiltered beryllium tubes can result in radiation doses that cause erythema in some patients.

Most mammography machines have filters, but state radiation control surveys recently found a few machines to be operating with beryllium windows without added filtration.

The recommendation notes that manufacturers will be required to incorporate filtration in mammography machines produced under the new FDA radiation protection standard for diagnostic x-ray equipment. The standard covers equipment produced after Aug. 15, 1973.

All mammography units, FDA said, should be operated with filtration at least equal to that provided by 0.5 millimeters of aluminum as recommended by United States and international radiation protection authorities. Such filtration reduces patient exposure by removing low-energy x-rays that do not contribute to the production of a useful x-ray image.

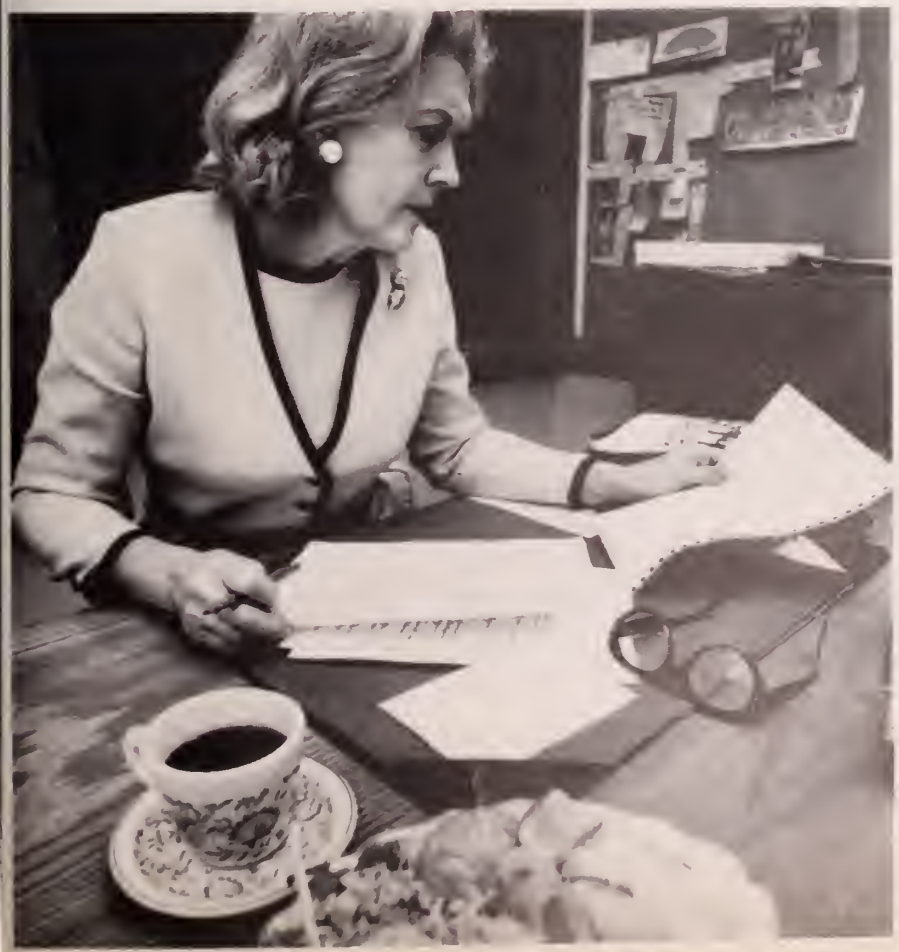
The recommendation reemphasizes the need for state radiation control regulations to require mammography equipment filtration and asks that, pending regulatory action, state agencies advise equipment users of the desirability of adding necessary filtration.

Literary Hemorrhoids

Mrs. S.R., 47, high school English teacher. A history of anorectal pain and burning of several years' duration. On and off weight reducing diets, the insufficient bulk of which has aggravated a chronic constipation problem. Subsequent straining at stool has precipitated an acute episode of internal-external hemorrhoids.



a typical proctological patient



to help relieve the pain, itching, burning associated with this and similar anorectal conditions

prescribe

Anusol-HC®

hemorrhoidal suppositories with hydrocortisone acetate

Each suppository contains hydrocortisone acetate 10 mg, bismuth subgallate 2.25%, bismuth resorcin compound 1.75%, benzyl benzoate 1.2%, Peruvian balsam 1.8%, zinc oxide 11.0%, and boric acid 5.0%, plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration Anusol-HC One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol. One suppository in the morning, one at bedtime, and one immediately following each evacuation.

And for long-term patient comfort...recommend Anusol® hemorrhoidal suppositories. Each suppository contains the ingredients of Anusol-HC without the hydrocortisone.

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ANGP-23 Rev



Antivert® (meclizine HCl) for vertigo*

...and then on to Venice

- Indicated in the management of nausea, vomiting and dizziness associated with motion sickness.
- Found useful in the management of vertigo associated with diseases affecting the vestibular system.
- Available as Antivert® (12.5 mg. meclizine HCl) blue and white scored tablets and also as Antivert®/25 (25 mg. meclizine HCl) yellow and white scored tablets.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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AHA Defines Role of Medical Staffs

Hospital medical staffs share a dual responsibility with administrators to see that patients receive a high quality of health care and that effective utilization of services are realized, according to the Board of Trustees of the American Hospital Association.

The board has approved a new document entitled "Guiding Principles for Governance of the Health Care Institution," which also states that physicians share equal responsibility with administrators for the "efficient use of resources and the execution of policy" for the hospitals to which they admit their patients.

The AHA board makes note in the principles that physicians participate increasingly as members of the governing board in the sense of community representatives. "When the health care institution chooses a physician as a community representative, this physician should not serve the dual role as representative of the medical staff," the board points out.

Instead, the board recommends that one or more of the following mechanisms may be employed to enhance liaison between the two bodies: (1) the joint conference committee; (2) medical staff membership on the governing board; (3) medical staff membership on committees of the governing board, or (4) any other method acceptable to the governing board and the medical staff.

The principles point out that the medical staff of a hospital must achieve an effective organization of its own in order to carry out activities. Physicians must be responsible for medical judgments for the care of their patients, peer judgment of the qualifications of physicians and dentists and the recommendation to the governing board for the granting of staff privileges for physicians and dentists who have applied for them.

There should be appropriate representation from executive and administrative staff on the various medical staff committees to continue the concept of involvement in management, according to the principles.

"Appropriate utilization of committees with careful selection of members enhances the management process," the principles state. "Exchange of appropriate minutes within the institution among key administrative and medical staff members provides an informational base for all echelons of responsibility."

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

- high urinary levels
- generally good tolerance
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- rapid renal clearance
- high plasma concentrations
- economy (average cost of therapy: less than 6½¢ per tablet)

Before prescribing, please consult complete produc information, a summary of which follows:

Indications: Nonobstructed urinary tract infections (mainly cystitis, pyelitis, pyelonephritis) due to susceptible organisms. **Important Note:** *In vitro* sensitivity tests not always reliable; must be coordinated with bacteriological and clinical response. Add aminobenzoic acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent urinary infections. Maximum safe total sulfonamide blood level, 20 mg/100 ml; measure levels as variations may occur.

Contraindications: Hypersensitivity to sulfonamides infants less than 2 months of age; pregnancy at term and during the nursing period.

Warnings: Safety in pregnancy not established. Do not use for group A beta-hemolytic streptococcal infections, as sequelae (rheumatic fever, glomerulonephritis) are not prevented. Deaths reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. CBC and urinalysis with careful microscopic examination should be performed frequently.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy or bronchial asthma. Hemolysis, frequently dose-related, may occur in glucose-6-phosphate dehydrogenase-deficient patients. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

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Gantrisin®

sulfisoxazole/Roche®



Usual adult dosage:
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Pediatric Symposium Set for Memphis

The third annual Le Bonheur Children's Hospital-University of Tennessee College of Medicine Pediatric Symposium will be held on Friday, Dec. 8, 1972, at the LeBonheur Children's Hospital amphitheater in Memphis.

Two outstanding speakers have been invited to participate in the symposium. They are Dr. Benjamin M. Kagen, professor of pediatrics, University of California at Los Angeles, director and chairman of the division of pediatrics at Cedars of Lebanon Hospital in Los Angeles, and co-author of "Current Pediatric Therapy." Dr. Kagen will talk on "Recent Advances in the Mode of Action and Use of Antibacterial Agents."

The second guest speaker is Dr. Allen Conn, director of the Intensive Care Unit, Toronto Hospital for Sick Children and professor of anesthesia for the University of Toronto College of Medicine. He will discuss "The Practical Approaches to Management of Respiratory Problems."

Postgraduate credit will be given to those who attend the symposium.

Med Library Association Issues Directory

Twenty-nine hundred individual and institutional members are listed in the biennial directory of the Medical Library Association. Correct as of July 1, 1972, individuals are entered alphabetically by surname, institutions are listed geographically. For each institution, the name of the librarian, and the telephone and TWX numbers are given, in addition to the street address.

The $50 price to nonmembers offers business firms an up-to-date, inexpensive mailing list. Checks should accompany orders to the Medical Library Association, Suite 2023, 919 N. Michigan Ave., Chicago, Ill. 60611.

AAMA Holds 16th Annual Convention

Acupuncture and the perils of malpractice litigation were two program topics of the 16th annual convention of the American Association of Medical Assistants (AAMA). The meeting, emphasizing continuing education for medical office assistants, was held Oct. 17-21 at the Del Webb's TowneHouse in Phoenix. Nearly 1,000 registrants representing 46 states and the District of Columbia attended.

Mississippians attending as delegates were Mrs. Thelma Van Cloostere of Long Beach, Mississippi society president; Mrs. Helen Donohoo of Gulfport; and Mrs. Evelyn Wright of Tupelo. Alternate delegates include Mrs. Dianne Ruscoe and Mrs. Gladys Lamb, both of Greenwood; and Mrs. Marian Cook of Tupelo.

AAMA is a national organization of 15,000 medical assistants and secretaries, technicians, receptionists, bookkeepers, office managers and other personnel. They work under the direct supervision of a licensed physician, serving as the direct link between him and his patients, his associates and the suppliers of equipment and medications. The major objective of the association is to continue to increase the education and professionalism of medical assistants.

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"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

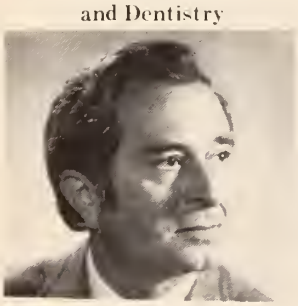
13.8%
Do not believe combination drug products are useful.

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility – and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription–which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to he found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin hut forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

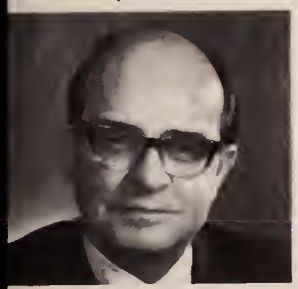
The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a great deal of money. I wish we could agree on a "grandfather clause" approach to preparations that have been in use for a number of years and that have an apparent satisfactory track record.

For example, I think some of the antibiotic combinations that were taken off the market by the FDA performed quite well. I am thinking particularly of penicillin - streptomycin combinations that patients – especially surgical patients – were given in one injection. This made for less discomfort for the patient, less demand on nurses' time, and fewer opportunities for dosage errors. To take such a preparation off the market doesn't seem to be good medicine, unless actual usage showed a great deal of harm from the injection (rather than the proper use) of the combination.

The point that should be emphasized is that there are both rational and irrational combinations. The real question is, who should determine which is which? Obviously, the FDA must play a major role in making this determination. In fact, I don't think it can avoid taking the ultimate responsibility, but it should enlist the help of outside physicians and experts in assessing the evidence and in making the ultimate decision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories



If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" decries the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the *usual* dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

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JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION
November 1972, Vol. XIII, No. 11

ORIGINAL PAPERS

The Aggressive Management of Pelvic Abscess

ALAN L. KAPLAN, M.D., and
WARREN JACOB, M.D.
Houston, Texas

THE PELVIC ABSCESS that is a sequela of nonpuerperal infection in the genital tract is the subject of this discussion. The abscess that may result from puerperal infection, from infection in another pelvic organ or that may follow gynecologic or other intra-abdominal surgery is not to be included. The location of the abscess may be within the tube and ovary, between the leaves of the broad ligament or it may be a collection of purulent material within the pelvic cavity, generally in the cul-de-sac, in which case its upper wall is usually formed by matted and adherent loops of intestine. An ovarian abscess which develops as an isolated lesion without simultaneous tubal infection is rare. It is usually seen as a sequel to hysterectomy with infection apparently spreading along lymphatic routes.

The classical management of the pelvic abscess is one of conservatism. Medical therapy consisting of maintenance of fluid and electrolyte balance, sedation and antibiotics is the treatment of choice. The overwhelming majority of cases will respond to this medical regimen, but this often means long, protracted periods of intentive care; and, even after a response has finally occurred, repeated admissions are usually required for exacerbations of the infection. Pregnancy is extremely rare in these patients and surgery is required at a later date in a very high percentage. In 1961 Collin's group in New Orleans[1] reported 174 cases of pelvic abscess of which 161 responded to intensive medical therapy. One hundred and thirteen of these patients required surgery at a later date for residual problems.

This paper is about the pelvic abscess that is a sequela of nonpuerperal infection in the genital tract. The authors discuss the classical conservative management of the pelvic abscess and then cover 115 cases of pelvic abscess that were subjected to immediate laparotomy and definitive surgery in the acute phase of the infectious process at Baylor Hospitals. Details of materials, methods, technical aspects of surgery and postoperative care, and results are given.

Definitive excisional surgery for an acutely infected pelvic abscess has long been considered difficult and dangerous. Consequently, the indications for surgical intervention in the acute stage have been quite strict. These are: (1) failure to respond to medical therapy; (2) a questionable diagnosis; (3) rupture; (4) evidence of an intra-abdominal catastrophe; (5) associated suppurative phlebitis; and (6) a pointing abscess that can be drained extraperitoneally.

At the Baylor Hospitals from 1958 through 1963, 115 cases of pelvic abscess were subject-

From the Department of Obstetrics and Gynecology, Baylor College of Medicine, Texas Medical Center, Houston, Tex.

ed to immediate laparotomy and definitive surgery in the acute phase of the infectious process. One hundred and three patients were operated on because of failure to respond to medical therapy and the other 12 because of a classical picture of rupture. In reviewing these cases we became quite impressed by the low morbidity and mortality rates. Only four deaths were noted and two of these were patients with ruptured abscesses. The other two deaths occurred in patients who failed to respond to medical therapy; however, the causes of death were not specifically related to the nature of the surgery. The first death occurred on the 34th postoperative day, 13 days after discharge. This was a cardiac death in a patient who had a long history of rheumatic heart disease. The second death occurred on the 8th postoperative day and was due to spontaneous bilateral pneumothorax. It is interesting to note that the patient had been discharged and the death occurred suddenly while she was preparing to go home.

Injury to the gastrointestinal tract was the major operative problem encountered, occurring in 11 patients or 9.5 per cent of the cases. The postoperative complications were not remarkable.

These facts began to make us wonder regarding the advisability of elective immediate surgery. For this reason a prospective study was planned and carried out in which all patients with a pelvic abscess were electively subjected to definitive surgery in the acute stage after sufficient preoperative preparation with fluid, blood and antibiotics. This study is the major segment of this discussion.

MATERIAL AND METHODS

During the 30-month period from January 1964 through June 1966, all patients with the presumptive diagnosis of a pelvic abscess were managed identically. The clinical diagnosis of a pelvic abscess was made in patients presenting with pain, fever, signs and symptoms of pelvic peritonitis and a palpable, tender, cystic mass in the cul-de-sac or one or both adnexa. Unless there was evidence of rupture or some other acute intra-abdominal problem, intensive antibiotic therapy and blood, fluid and electrolyte replacement were begun. The antibiotics of choice have traditionally been Penicillin and Kanamycin with the addition of other carefully selected culture-dependent antibiotics as the situation warrants. This combination very effectively covers the usual offending bacterial spectrum and leaves inadequate coverage for only Pseudomonas, some staphylococci and Bacterioides, of which only the latter is of some occasional concern in pelvic infections. Pseudomonas and staphylococci are very rare offenders.

TABLE 1

OPERATIVE INJURIES—71 CASES, 1964-1966

1. Intestinal	6
Sigmoid	3
Rectum	1
Ileum	2
2. Urological	0

Under such a medical regimen these patients will respond in one of three ways: (1) *Complete response.* These patients are almost entirely well within 24-48 hours. It is in this group that we find many diagnostic errors. Often patients with severe, acute salpingo-oophoritis are admitted with the presumptive diagnosis of a pelvic abscess as the extreme tenderness and guarding make the examination and accurate appreciation of a mass quite difficult. Also, minimally infected neoplastic cysts will sometimes present and respond in this fashion. About 10 per cent of the patients admitted with the presumptive diagnosis of pelvic abscess will fall into this group. (2) *No response.* These patients remain seriously ill with little or no improvement. In the past we operated on these patients after five-seven days of therapy. Less than 10 per cent of the patients fall into this group. (3) *Partial response.* These patients respond slowly but progressively and usually become well after a long, protracted period of therapy. Over 80 per cent of the patients fall into this category and over 70 per cent of these patients will require surgery at some later date.

Those patients who showed either no response or partial response were operated on after 24-72 hours of medical preparation. The only exceptions to surgery in these groups were made because of age or low parity. Those patients who responded completely were not operated on unless it was for the presence of a mass per se. These cases are not included in this report.

Surgery consisted of a total abdominal hysterectomy and bilateral salpingo-oophorectomy. Because of the high incidence of damage to the gastrointestinal tract in the original series, particular care was paid to the handling of the bowel, and when feasible a 24-hour bowel preparation was carried out. The pelvis was drained via the vagina and occasionally through the flank. Antibiotics were usually continued for four-five days following surgery.

During this 30-month period 71 patients were managed in this fashion. All cases were found to have an acutely inflammed pelvic abscess at laparotomy.

RESULTS

Analysis of these 71 cases shows that the operating time was less than two hours in 61 per cent. Only six cases took longer than three hours. Sixty-five per cent of the patients received no blood transfusion and only five patients were given over two units. The period of postoperative hospitalization was average in 77 per cent and unusually prolonged in only seven cases.

The major operative injuries are noted in Table 1. The eight per cent incidence of damage to the gastrointestinal tract is high but is not truly reflective of how its seriousness was decreased from the original group. All six injuries in the prospective group were only serosal tears and required only simple repair. All healed primarily without resultant fistulas or obstruction. In the original series the lumen of the bowel was entered in five instances and two of the seven injuries to the large bowel were severe enough to warrant a protective colostomy. Also, one fistula occurred in the original group.

The postoperative complications are noted in Table 2 and they are unremarkable. The one case of small bowel obstruction responded to conservative management. None of the three cuff abscesses required surgical drainage. One evisceration occurred.

DISCUSSION

It is rather interesting and unique that even though it is a classical surgical principle that an abscess should be either drained or removed, this has not been the case with the pelvic abscess. It has been considered best to manage these patients with intensive medical therapy unless there is evidence of an acute intra-abdominal complication or unless no improvement occurs. Over 90 per cent of the patients can be managed conservatively, but the vast majority of these will require long, protracted periods of therapy, multiple admissions for exacerbations and definitive surgery at some later date. In addition, pregnancy is extremely rare in this group of patients with a bonafide quiescent pelvic abscess.

TABLE 2

POSTOPERATIVE COMPLICATIONS—
71 CASES, 1964-1966

1. Wound	
Superficial	7
Subfascial	1
Evisceration	1
2. Chest	
Pneumonia	2
3. Intestinal	
Obstruction	1
Prolonged ileus	1
4. Pyelitis	5
5. Cuff problems	
Abscess	3
6. Deep thrombophlebitis	1
7. Septicemia	1

Because of the long periods of disability and the great expense to both the patient and the hospital, it seemed pertinent to question the classical gynecological principle of reluctance to operate in the acute inflammatory stage. After reviewing our results with patients subjected to immediate definitive surgery because of no response or rupture, we became sufficiently encouraged to begin our prospective study. The 9.5 per cent incidence of injury to the gastrointestinal tract in this initial series was of notable concern; however, it was thought that this figure could be reduced.

Our results with the 71 patients who were electively subjected to immediate surgery are gratifying. The operating time was not prolonged and it must be remembered that all cases were operated upon by the resident staff. Only five patients received over two units of blood. There were no deaths and with the exception of the eight per cent incidence of injury to the gastrointestinal tract, the frequency of operative damage and postoperative complications was not exceptional. The decrease in the number of serious injuries to the bowel is attributed to an awareness and anticipation of the problem.

There are several pertinent points regarding the technical aspects of the surgery and postoperative care that should be mentioned. (1) The operation must be complete in that all genital tissue should be removed. No attempt should be made to conserve an ovary regardless of how normal it appears grossly for it may well harbor microscopic infected foci. (2) All pedicles should be clamped broadly as the tissues are edematous, congested and friable. They tear easily and capillary and venous oozing can be profuse. (3) Particular care must be given to the intestinal tract when adhesions are present. It is not as resistant to manipulation and blunt dissection as in the noninfected case. In the absence of surgical urgency, a 24-hour mechanical and antimicrobial

intestinal preparation is carried out. If preoperatively a secondary ileus or mechanical obstruction is present, intubation and appropriate management are carried out prior to surgery. (4) The vaginal cuff should be left open and drains or suction catheters placed into either iliac fossa as indicated. (5) In closing the abdominal incision a nonabsorbable suture material should be used for the anterior rectus fascia. We employ internal retention sutures of #1 Mersilene or Tevdek that incorporate the peritoneum and anterior rectus fascia. The bulky external retention sutures that incorporate the skin and subcutaneous tissues are uncomfortable and usually preclude good drainage of a subcutaneous infection should it occur. These superficial infections can be expected in about 10 per cent of the cases. (6) Antibiotics are usually continued for four-five days following surgery.

If these suggestions are followed, we believe that immediate definitive surgery can be done safely and that the major hazard of intestinal damage can be avoided. This study has effectively proven to us that surgery can be done during the acute phase with only an apparent slight increase in the operative risk. Whether this is a real increase in operative risk and whether the aggressive approach is actually a better mode of management than the conservative regimen have not been proven. At the present time we have a random selection study in progress to compare the two modes of management. We are also attempting to determine the degree of importance of the anaerobic organisms such as Bacterioides and the anaerobic streptococcus in these nonpuerperal abscesses and whether we need to alter our initial antibiotic therapy. Certainly, there is no question but that immediate relief and total cure are obtained with the aggressive approach. However, it is also true that if surgery is delayed until the chronic phase some few patients might be spared operation, some few patients might become pregnant and in those patients that ultimately come to surgery ovarian tissue might possibly be preserved in some few. ★★★

(77025)

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FOUL PLAY

The butcher had had a busy day; down to his last chicken, he placed it on the scale and told his customer. "That will be $1.85."

"Don't you have a larger one?" asked the woman.

Thinking fast, the butcher walked to the refrigerator with the chicken, paused, then walked back with it and held it up before his customer. "This one," he said, "will be $2.25."

The woman hesitated, made up her mind and said brightly. "I know what I'll do, I'll take both of them. My son is coming home from college."

Iron therapy for anemia is almost as old as history itself



Celsus's empirical use of iron

Aulus Cornelius Celsus recommended an unusual form of iron therapy for the treatment of enlarged spleens—the oral administration of water that blacksmiths had used for dousing white-hot iron.

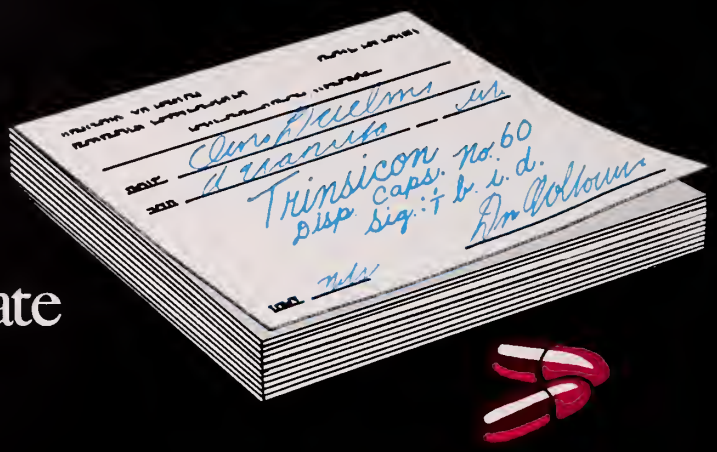
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(See reverse side for prescribing information.)

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Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	240 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin	7.5 mcg.

(The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)

Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	0.5 mg.

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B_{12} progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

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Chondrosarcoma of the Mandible

ROBERT T. LOVE, JR., M.D.
Greenville, Mississippi

Chondrogenic tumors of the mandible and maxilla are rare as reported in the literature, says the author. He presents a case report of a 19-year-old Negro male with chondrosarcoma of the left mandible which is believed to be the 23rd reported case. Dr. Love discusses the clinical findings, pathogenesis and treatment of the lesion which was originally believed to be an abscessed tooth.

CHONDROGENIC TUMORS of the mandible and maxilla are very rare. One may not expect to see more than one or two cases in a lifetime. At the Mayo Clinic, a review of cartilaginous tumors of the facial bones revealed only three cases in a period of 50 years.

Chondrogenic tumors of the mandible and maxilla arise mainly from vestigial rest. In the mandible, tumors arise from the remnants of Meckel's cartilage. Other sources in the mandible are the secondary cartilages found in the mental region and the coronoid and condyloid processes. In the maxilla, the tumors may arise from the remains of a chondrocranium or the part of the nasal septal cartilage trapped between two palatal plates during development of para-septal cartilage.

The biologic behavior of the cartilaginous tumors in the jaws is found to be different from that of tumors occurring in other bones. Because of their sparcity, their aggressiveness and their poor prognosis, these tumors are not sufficiently appreciated.[1] In this paper we would like to present what we believe to be the 23rd reported case of chondrosarcoma of the mandible.

CASE REPORT

A 19-year-old Negro male was seen in May of 1971 with swelling in the left mandibular body which had been present for several months. He had been seen previously by two dentists prior to entering the Navy and they had told him that he had an abscessed tooth which needed to be removed when the edema around the tooth subsided. The patient subsequently entered the Navy and was again told on induction that he had an abscessed tooth. However, the mass continued to enlarge. He was seen by an oral surgeon while he was in the Navy; the area was biopsied and this was found to be chondrosarcoma. He was discharged from the service by a medical board and returned to his home in Greenwood where he was seen by Dr. Raymond Browning who referred the patient to me.

On physical examination the patient had a mass in the left mandibular ramus that was not remarkably painful to palpation. There was evidence of a biopsy having been done intraorally. The x-rays which were sent with the patient from the naval hospital showed that the patient had a radiolucency in the left body of the mandible. The patient was taken to the operating room on May 7, 1971, and a hemimandibulectomy was done and a small portion of the ramus on the left side was left to attach the bone graft to. An autogenous rib graft was used for the bone graft. It was attached to the small portion of the ramus

From the Department of Surgery, Washington County General Hospital, Greenville, Miss.

on the left side and at the mandibular symphysis. He had his teeth wired in occlusion and they were left in this position for eight weeks. He was seen several times during this period and the bone graft appeared to take nicely and when he was last seen on July 7, 1971, he had no evidence of recurrence at that time and the bone graft appeared to be doing well.

Examination of the surgical specimen revealed a portion of the mandible which included the left half of the mandible from the symphysis to include four cm of the ramus. Surrounding muscles and recognizable salivary glands with four teeth were also present in the specimen. Microscopic examination showed that the surgical specimen had included wide margins without evidence of tumor in them.

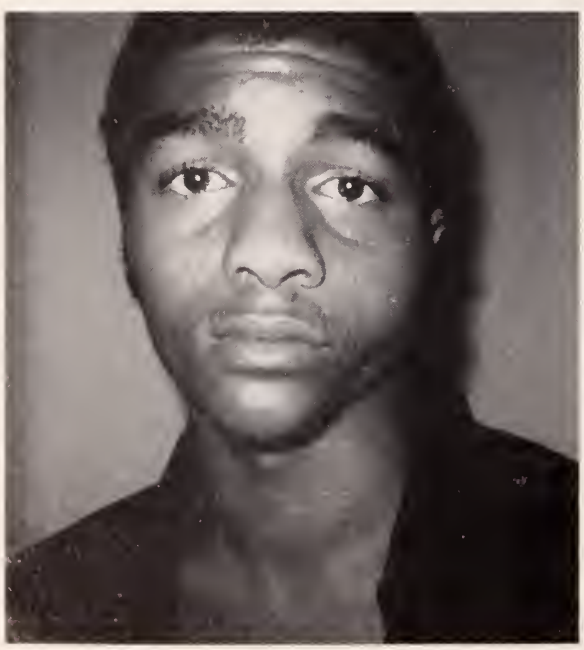
CLINICAL FINDINGS

We believe this to be the 23rd reported case of chondrosarcoma of the mandible. In 1968, a review of the literature revealed that there were 22 cases that had been reported to that date. None other can be found in the literature since that time.[2]

The clinical features of these tumors reveal that this is a tumor which is usually seen in the third decade of life. They are three times more common in males than in females. The time lapse from detection of the initial symptoms to the first setting varies—usually it is around six months. Symptoms and physical findings are usually those of swelling. The mass is usually hard to palpation but in rare instances it can be soft and fluctuant. Very few of the patients with this tumor will complain of pain. Other symptoms which may be noted are irritation of the teeth, malocclusion and trismus. The radiological appearance of these tumors gives no indication that they may be cartilaginous tumors. Most tumors appear to be osteolytic defects with expansion and resorption of bone. The defects usually have a ground glass appearance. In some cases they may show areas of calcification.[3]

PATHOGENESIS

The pathogenesis of cartilaginous tumors of the mandible is obscure inasmuch as cartilage normally is not present after the first year of life. The mandible develops bilaterally in the fetus as a thin plane of bone. Associated with this is a round rod of cartilage, Meckel's cartilage, which extends from the area of the middle ear to the midline where it is in contact with cartilage of the other side. Most of this cartilage disappears without contributing to the formation of the mandible. The two halves of the mandible are joined in the midline by fibrocartilage which is derived from differentiation of connective tissue in the midline. By the end of the first year the two halves of the mandible unite by ossification of the symphyseal fibrocartilage. It has





Figures 1 and 2. These are postoperative photographs of the patient taken approximately two months after surgery.

been postulated that the chief source of cartilaginous cells is vestigial rest. In the mandibular symphysis where cartilaginous elements should disappear well before the first year of life, remnants of Meckel's cartilage may persist. Other sources of cartilage cells include chondroid bone, differentiation of mesenchymal cells in the chrondoblast and metaplasia of connective tissue in the cartilage. In the present case, embryonic fibrocartilage rest tissue is regarded as strong evidence of the chondrosarcoma's origin.

There is a more serious prognosis associated with chondrosarcoma than has been previously appreciated. Sixty per cent of the patients with these tumors will die within five years. Death is usually due to local destruction of vital structures or distant metastases. The usual site of the metastases is the long bones and lungs.

Histologic grade of the tumor can offer an indication of the prognosis. It has been shown that low grade chondrosarcomas have a better prognosis, while the reverse is true of the higher grade chondrosarcomas.

TREATMENT

The treatment of choice in all cases of chondrosarcoma of the mandible or maxilla, of course, is surgical. Wide excision with good margins free of tumor offer the best chance for no recurrence of the tumor.

The beneficial effects of x-ray in these tumors has been debated since the mid 1930's. In about 1935 it was reported that interstitial therapy combined with surgery appeared to have some beneficial effect on the final outcome. Since that time, several reports have indicated that radiation therapy, even for palliation, was of little or no value. However, more recently, it has been reported that cobalt may be of some value in treatment of these tumors. One case has been reported recently of a chondrosarcoma of the maxilla which was not amenable to surgery, but after treatment with intensive cobalt therapy, the patient responded nicely; however, the tumor was not cured. This brings up the possibility again that x-ray combined with surgery may offer the best type of treatment for these patients.

As far as chemotherapy is concerned in the treatment of these patients, cyclophosphamide and methotrexate have both been used without any effect.[4]

SUMMARY

(1) Chondrosarcomas of the mandible and maxilla are very rare tumors.

(2) Malignant tumors of chondrogenic origin are much more prevalent than benign tumors of the chondrogenic origin.

(3) Prognosis of the patients with chondrosarcoma of the mandible and/or maxilla is more serious than it has usually been thought to be.

(4) Surgical removal is the treatment of choice, with radical resection advised in all cases.

(5) The possibility of combining cobalt with surgical removal of the tumor is an interesting possibility. ★★★

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Sources of care who do not wish to participate can still provide services to CHAMPUS beneficiaries. They bill the patient for the full cost of services and the patient submits a claim to CHAMPUS for reimbursement. These beneficiaries are warned, however, that they are obliged to pay whatever the source of care charges although CHAMPUS will reimburse only on the basis of reasonable charges.

Mediphone: Physicians Saving Lives by Telephone

JOHN G. BELLOWS, M.D., Ph.D.
Chicago, Illinois

PHYSICIANS ARE saving lives and treating trauma and disease more effectively as a result of a dynamic innovation in medical information and consultation begun in July. The first nationwide physician's telephone consultation service, known as MEDIPHONE, brings expert medical specialists into direct communication anywhere in the continental United States by dialing 312/782-7888.

When a medical problem confronts a physician, the health of the patient may depend upon immediate decisive action. In this era of rapid medical advances, no practitioner is satisfied or justified in providing insufficient or obsolete treatment. MEDIPHONE removes this obstacle to high quality medical care by providing the physician with up-to-date logical medical procedures and information.

Simply by dialing 312/782-7888, the physician is placed in immediate communication with the appropriate specialist he needs to assist him, thus removing former geographic or time barriers to consultation.

MEDIPHONE demonstrated its life-saving potential to Dr. Forest Grant of the west Texas town of Riverton. His patient, Richard Jamison, a 44-year-old truck driver, suddenly experienced a fluttering sensation in his chest, followed by shortness of breath, dizziness, and faintness.

Greatly disturbed and alarmed, Mrs. Jamison telephoned Dr. Grant who urged Mrs. Jamison to rush her husband to the hospital. Examination disclosed that his blood pressure was low and that the pulse rate was over 200 beats per minute. He complained of pain in his chest. An electrocardiogram showed the typical signs of ventricular tachycardia and coronary thrombosis.

Aware of the serious nature of the disease, Dr. Grant called his partner for conference. Unfortunately, it was Saturday afternoon and his partner had left town for a week-end fishing trip to a location without telephone facilities. However, Dr. Grant remembered that he had read a newspaper article two days earlier about a new medical service, MEDIPHONE, which provides nationwide medical consultation by telephone. Finding the newspaper clipping in his wallet, he dialed 312/782-7888. In less than two minutes, he was speaking to Dr. Joseph Voight, a noted cardiologist at a large medical center. Dr. Grant quickly described his patient's condition and Dr. Voight confirmed his diagnosis. He recommended that the patient immediately be given a large dose of lidocaine intravenously along with quinidine. In a few hours, the rapid heart beat was reduced to 80 beats per minute. Dr. Grant recommended that the patient stay at the hospital for a few days for observation and treatment, and on the fifth day, Mr. Jamison was discharged from the hospital, receiving a prescription for medicine to be administered at home.

MEDIPHONE also fulfills its educational and consultative services for non-emergency calls. Dr. Eliot Stone of Yuma, Ariz. recently called MEDIPHONE to obtain advice and recommendations from a specialist in lung diseases. Dr. Stone was treating a 52-year-old man, Samuel Taylor, proprietor of the local furniture store, who had a symptom complex consisting of 102° F temperature, cough, and pain in the chest for about a week. X-rays disclosed a scattering of infiltrative patches in the right and left lungs. The sputum and coughed up material showed none of the usual organisms that cause bacterial pneumonia. Complement fixation tests resulted in a positive reading for mycoplasma organisms. He also ascertained that Mr. Taylor's son, James, had been

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Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflex esophagitis or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

In theory a curare-like action may occur, with possible loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted.

Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Bonthine

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use in serum-type vials of 30 mg

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at their neighbor's home where his friend was suffering from a so-called cold. Uncertain of the nature of the disease, Dr. Stone called MEDIPHONE and within minutes he was speaking with Dr. Louis Green, a well-known lung specialist in Tucson, Ariz. Dr. Green diagnosed the disease as a mycoplasma pneumonia from the findings described by Dr. Stone.

Fortunately, this disease which is caused by a minute bacterium responds quickly and favorably to the tetracycline group of drugs and to erythromycin. Dr. Stone prescribed a tetracycline antibiotic and within three days, Mr. Taylor made an uneventful recovery. James also received the drug as a prophylactic measure and did not develop an infection.

In still another case, Stephan Brown, a farmer, fell off of his tractor. While his wife and several farm hands stood helplessly by, a steel blade of the rotary machine severed Brown's right arm about one inch above the wrist. Carrying the severed portion of the arm, the farm hands rushed him to the office of the family physician. Thanks to MEDIPHONE, the physician was able to reach a surgeon experienced in traumatic surgery.

The patient arrived at the medical center in a state of shock. While receiving treatment for shock, the surgeon and his associates performed the necessary procedures to unite the hand and wrist. Two weeks later, the patient was able to move his hand and wrist, but the hand had not yet recovered its sensory functions. Chicago ophthalmologist Dr. John Bellows, director of MEDIPHONE and the American Society of Contemporary Medicine and Surgery, says that this type of service was conceived three years ago, but was not implemented until last July. Only then did the president of the organization, Dr. Michael DeBakey, the chairman, Dr. Morris Fishbein, and the director, Dr. John G. Bellows, learn that a similar operation has been underway on a smaller scale in Birmingham, Ala.

Known as MIST (Medical Information Service by Telephone), this service covers only the immediate surrounding area of Birmingham, and is funded by a regional government agency. MIST received only 20 calls a month when it started, but as the value of its service to physicians became known, its load skyrocketed to 3,000 calls a month. The director of MIST is Dr. Margaret Klapper of the University of Alabama.

Dr. Bellows estimates that MEDIPHONE is currently prepared to handle up to 7,000 calls daily. Hundreds of specialists representing every medical field are participants in MEDIPHONE.

Now any physician, regardless of his geographic location, can call (312) 782-7888 and receive expert advice from one of 400 outstanding specialists in all fields of medicine and surgery.

This service is available to all physicians and does not require membership or pre-registration. It is hoped that physicians will use this valuable service when faced with perplexing medical problems. The charge for a five minute conference with a prominent specialist is $15.00.

MEDIPHONE is a natural extension of the work and objectives of the American Society of Contemporary Medicine and Surgery, which is dedicated to medical information, continuing education and consultation. The Council on Continuing Education of the American Medical Association states that the inquiring physician may accumulate credits in Category 5 and the consultant may receive credits in Category 3. MEDIPHONE is a forum for the discussion of a difficult case between a specialist and the calling physician. The patient obviously benefits from the knowledge his physician has received as a result of this discussion.

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CHARLES L. MATHEWS
Executive Secretary, MSMA

Learning Disabilities — The New Problem

Ophthalmologists are often the first referral source for the school child with a reading problem. The referring teacher or school nurse correctly assumes that an examination for eye disease should be one of the first things considered when a child is having trouble with the near tasks of vision; e.g., reading. Occasionally, an ocular problem is discovered: hyperopia, iritis, congenital cataract, or hereditary macular disease. But most often, the results of complete visual analysis are normal.

The next referral sources can include the child's pediatrician. Because learning disability is a heterogeneous group and various degrees of brain dysfunction may be demonstrated, both a neurological examination and an encephalogram may be necessary.[1] A psychological-educational evaluation may be done, and conferences with the school personnel usually determine the choice of treatment for the child.

In some areas, a new problem has confronted the educator of school children, that of visual-perception training as advocated by some optometrists. Schools are being encouraged to institute some type of perception program in the early school years with the hope that the program of visual-perception training will help the child achieve better.

I believe that all people are in favor of any program that will aid the education of the child. But, before institution of a program, we should have firm evidence that it is scientifically and educationally sound. The visual-perception program that is advocated by optometrists lacks such evidence.

Carlson and Greenspoon[2] state, "We have studied much of the material provided by the optometric development training approach (regarding visual-perception-motor training) and find most of it is outdated, unsubstantiated, esoteric, and pseudoscientific."

In 1969, the National Institute of Neurological Diseases and Stroke[3] surveyed the scientific evidence relating to reading disorders. They stated, there is little research support for the assumption that reading disability is primarily a visuomotor deficit. It is apparent, then, that application of a program of visual training such as that suggested by Getman (an optometrist) to large undefined populations of children suffering from mild to moderate educational difficulties is less than sound.

In 1971, Dr. Swartwout, an optometrist, wrote in an article on educational visual training programs that "although the opinions stated in this article are *not* substantiated by formal research, they are based on clinical experience, etc."[4] Again, an optometrist admits that there is no research to lend support to his visual training program.

What can the physician do? What can the ophthalmologist do? He can help the public and educators become more interested in the learning disabilities and provide them with guidance. In 1971, the American Association of Ophthalmology, The American Academy of Ophthalmology and Otolaryngology, and the American Academy of Pediatrics published a statement regarding the eye and learning disabilities.[5] The statement in part states, "No known scientific evidence supports claims for improving the academic abilities of learning-disabled or dyslexia children with treatment based solely on visual training (muscle exercises, ocular pursuit, glasses)." We should make this statement available to our patients. This would be a start. The ophthalmologist and the physician should become involved in the educational system of our community, in the student health committees of the medical societies, and in any activity in which he can serve the public.

The physician or the ophthalmologist or both can help the child with learning problems by making sure that he is free of disease which may hamper his education. The physician can deliver to the educator a child who is mentally and physically fit to learn. The physician can act as a consultant to the educators in problems affecting the health and performance of the child. Only by becoming involved can the physician do his share in protecting the mental and physical health of the people.

PETER R. D'ALENA, M.D.
San Jose, California

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1. Johnson, D. J. and Myklebust, H. R.: Learning Disabilities. New York, Grune & Stratton, Inc., 1967.
2. Carlson, P. V. and Greenspoon, M. K.: The Uses and Abuses of Visual Training for Children With Perceptual-Motor Learning Problems. Amer. J. Optom. 43:161-169, 1968.
3. Marsland, R. L. and Cratty, B. J.: The Nature of the Reading Process, the Rationale of Non-Educational Remedial Methods, in E. O. Calkins (ed.): Reading Forum, monograph II. Bethesda, Md., National Institute of Neurological Diseases and Stroke, 1969, p. 159.
4. Swartwout, J. B.: Educational Visual Training Programs. Academic Ter. 7:85-92, 1971.

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Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.** 2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. The drug should be withdrawn and insulin when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. 3. *Hypoglycemia:* Although hypoglycemic reactions are [illegible] when phenformin is [illegible] one, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.

Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake. (B) 98-146-103 D (6/72)

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5. The Eye and Learning Disabilities, Ad Hoc Committee of the American Academy of Pediatrics, the American Academy of Ophthalmology and Otolaryngology, and the American Association of Ophthalmology. Washington, D. C., American Association of Ophthalmology.

(Reprinted from Archives of Ophthalmology, pp. 239-240, Vol. 88, Sept. 1972, with permission.)

SBH Warns About Fire Extinguishers

Dr. Hugh B. Cottrell, State Health Officer, has asked families and fire departments in Mississippi to check home fire extinguishers "to determine if they contain a dangerous chemical which may be fatal when its fumes are inhaled."

The Food and Drug Administration warned that many home fire extinguishers, made during the past 25 years and sold throughout the United States until 1970, contained carbon tetrachloride.

The FDA has published a regulation which prohibits the sale of carbon tetrachloride, or any mixture of it, for use in the home, including fire extinguishers.

"Safer and more effective chemical extinguishers are available," said Dr. Cottrell, "and considering the risk involved with carbon tetrachloride, we strongly advise using other types of extinguishers."

According to the FDA, a 48-year-old Oregon woman died in July as a result of inhaling fumes from a broken extinguisher. The victim's husband also inhaled the fumes and became critically ill, but later recovered.

Joe D. Brown, director of the SBH Sanitary Engineering Department, advises families with suspicious extinguishers, "especially those unlabeled as to content," to call their local fire departments for instructions. "Any attempt to transport the old glass-bulb type extinguisher should be undertaken most carefully," he said, "and its destruction should be done by experts."

Contemporary Medicine and Surgery Plans Meet

Continuing Education for Excellence in Medicine and Surgery will be the theme of the 1973 annual meeting of the American Society of Contemporary Medicine and Surgery being held from Feb. 25-Mar. 3 at the Fontainebleau Hotel, Miami Beach. President of the society is Dr. Michael DeBakey.

Emphasis will be on contemporary surgical procedures in diseases of the cardiovascular system, proctology, gynecology, urology, otolaryngology, orthopedics, gastroenterology, reconstruction, and esthetic surgery.

The Council on Education of the American Medical Association has accredited the courses of the American Society of Contemporary Medicine and Surgery. A certificate will be awarded to all enrollees as evidence of participation.

In addition to their lectures, the speakers will hold individual or small group conferences upon request. All members are invited to participate actively by attending the group conferences. Time is available for a limited number of five-minute presentations on any subject.

Admission is: members—$50.00 and nonmembers—$125.00. Admission fees are refundable to Feb. 1, 1973.

For further information write: Miss Virginia Kendall, 30 N. Michigan Avenue, Room 1629, Chicago, Ill. 60602.

AMA Explores Drug Abuse Complications

The various medical complications in patients who abuse drugs will be examined in depth at a conference on Dec. 7 in Washington, D. C.

The conference, to be held at the Washington Hilton Hotel, is sponsored by the Committee on Alcoholism and Drug Dependence of the American Medical Association.

Dr. William M. Lukash, White House physician and chief of gastroenterology at Bethesda Naval Hospital, will serve as conference coordinator.

"The emphasis at the conference will be on clinical problems that develop from the patient's abuse of drugs," Dr. Lukash said. "We will stress recognition and treatment of the special problems drug-abusing patients present."

The conference is open to all physicians and other health professionals. Physicians in attendance will earn credits toward continuing education requirements. The program is acceptable for seven credit hours in Category II for the physician recognition award of the AMA and seven elective credits by the American Academy of Family Physicians.

Problems to be examined include: pulmonary, cardiac, neuromuscular and skin diseases related to drug abuse; surgery in addicts; maternal drug use and its implications for the infant; and diseases caused by dirty needles and other unsterile equipment used in drug injections. Special panels will consider treatment of overdose cases and hepatitis.

DEATHS

COATS, FILO BARCLAY, Hardy. M.D., University of West Tennessee College of Medicine and Surgery, Memphis, Tenn., 1911; interned Tulane University, New Orleans, La., one year; presented Golden "T" by University of Tennessee, 1961; died Sept. 19, 1972, age 90.

REYNOLDS, WILLIAM W., JR., Biloxi. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1945; interned Methodist Hospital, Memphis, Tenn., one year; died Sept. 6, 1972, age 59.

RYAN, E. W., Charleston. M.D., University of Louisville School of Medicine, Louisville, Ky., 1934; interned Louisville City Hospitals, Louisville, Ky., one year; died Oct. 1, 1972, age 67.

NEW MEMBERS

MORGAN, JOHN DOYLE, McComb. Born Jones County, Miss., Feb. 20, 1936; M.D., Washington University School of Medicine, St. Louis, Missouri, 1961; interned Albany, New York Hospital, Albany, N. Y., one year; residency in internal medicine, University Medical Center, Jackson, Miss., July 1, 1967-June 30, 1969; residency in pulmonary disease, same July 1, 1969-June 30, 1970; elected by South Central Mississippi Medical Society.

POWELL, CARROLL E., Hernando. Born Spartanburg, S. C., April 10, 1942; M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1966; interned City of Memphis Hospitals, one year; residency in pediatrics, same Jan. 1, 1968-Dec. 31, 1969; elected by Desoto County Medical Society.

WILLIAMS, JOHN ELLIS, Gulfport. Born Jackson, Miss., Dec. 26, 1934; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1961; interned same, one year; residency in surgery, St. Albans Naval Hospital, N. Y., Sept. 1964-Sept. 1968; elected by Coast Counties Medical Society.

PERSONALS

JASPER B. BECKER, JR., of Brookhaven and FRANK R. FORTENBERRY of Columbia were among 1,527 initiates inducted as Fellows into the American College of Surgeons during the annual five-day clinical congress held in San Francisco in October.

THOMAS M. BLAKE of Jackson was chairman of the program committee for the Southeastern Regional Meeting of the American College of Physicians held in Biloxi.

JOHN BOWER of Jackson is serving as president of the Southeastern Dialysis and Transplantation Association. Dr. Bower is director of the Artificial Kidney Unit at the University Medical Center.

F. G. BRATLEY of Jackson has been elected treasurer for 1972-73 of the Hinds County Unit of the American Cancer Society. GUY T. GILLESPIE, JR., is serving as chairman of the Awards Committee.

MARION E. COCKRELL displayed antique medical instruments and explained their uses to a recent meeting of the Biloxi Rotary Club.

J. T. DAVIS of Corinth was one of 14 U. S. physicians who recently attended a medical seminar in Russia and also toured medical facilities in Sweden and Denmark.

HARRY FULCHER, DAVID J. VAN LANDINGHAM, JIM G. HENDRICK, and BOYD SHAW were participants in the public information session on obesity given by Mississippi Baptist Hospital and its medical staff recently.

BENTON M. HILBUN of Tupelo was recipient of the trophy given by North Mississippi Medical Center for the first one to bag the limit at the annual dove shoot given by the hospital.

DEWEY H. LANE, JR., of Pascagoula was guest speaker at the Roundup Kickoff for Boy Scouts held recently at William M. Colmer Junior High School in Pascagoula.

JAMES R. MAYFIELD of Carthage announces the removal of his offices to 600 Highway 16 East for the general practice of medicine.

FRANK J. MORGAN, JR., of Jackson, has resumed his duties as Assistant State Health Officer. Dr.

Morgan was awarded the Master of Public Health Degree in Public Health and Medical Care Administration at the University of Texas School of Public Health in Houston and returned to the State Board of Health in July.

L. R. MURPHREE of Aberdeen has been appointed to serve on the Aberdeen airport commission.

CRAIG RATCLIFF of Brooksville and JACK DANIEL of Hattiesburg are newly elected board members of the Hub City Kiwanis Club in Hattiesburg.

JAMES C. RATCLIFF and GLENN PUGH of Brooksville have opened their new offices, the Brooksville Clinic, in Noxubee County.

LEE H. ROGERS of Tupelo announces the relocation of his office, the Tupelo Eye Center, at 610 Brunson Drive for the practice of ophthalmology.

M. L. SIGREST and WILL P. THOMPSON of Yazoo City are serving on the Yazoo County Home Health Advisory Committee.

WILLIAM A. SPENCER announces the opening of his office for general practice and surgery at Highway 315 East at I-55 in Sardis.

JAMES GRANT THOMPSON of Jackson was presented the Exceptional Service Award by the Selective Service System for his long service as chairman of the advisory committee on the selection of physicians, dentists and allied specialists.

GUY T. VISE, JR., of Jackson announces the opening of his offices for the practice of orthopedic surgery and rehabilitation at St. Dominic Medical Offices, Suite 425, 971 Lakeland Drive.

JAMES WADDELL and RAY WESSON of Ocean Springs are serving voluntarily as team physicians for the Greyhound football team. ROBERT CARTER of Biloxi has also assisted the team.

JOHN W. WALLER of Monticello has been appointed to the State Hospital Commission by Governor Bill Waller. Dr. Waller will represent the Second Supreme Court District (southern Mississippi) until July 1, 1976.

EARL T. WHITE of Greenville was honored with a farewell dinner by Greenville physicians, friends, and King's Daughters Hospital board of directors. Dr. White has retired after 50 years as pathologist at King's Daughters Hospital.

POSTGRADUATE CALENDAR

Nov. 3-4, 1972

CRITICAL PROBLEMS IN SURGERY
University Medical Center, Jackson
Nov. 3-4, 1972

Sponsored by The University of Mississippi School of Medicine postgraduate education committee and the department of surgery

Participants:

William O. Barnett, M.D., professor of surgery, The University of Mississippi School of Medicine

John D. Bower, M.D., associate professor of medicine, assistant professor of physiology-biophysics, The University of Mississippi School of Medicine, and director, artificial kidney unit, University Medical Center

Carlos Chavez, M.D., assistant professor of surgery, The University of Mississippi School of Medicine

J. Harold Conn, M.D., professor of surgery, The University of Mississippi School of Medicine, and chief of surgery, Jackson Veterans Administration Center

Joseph Gabel, M.D., associate professor of anesthesiology, and assistant professor of surgery, The University of Mississippi School of Medicine

James D. Hardy, M.D., professor of surgery and chairman of the department, The University of Mississippi School of Medicine

J. Harvey Johnston, Jr., M.D., clinical associate professor of surgery, The University of Mississippi School of Medicine

Richard Miller, M.D., associate professor of surgery, assistant professor of pediatrics (surgery), The University of Mississippi School of Medicine

William A. Neely, M.D., associate professor of surgery, assistant professor of biochemistry, assistant professor of physiology-biophysics, The University of Mississippi School of Medicine

Seymour Schwartz, M.D., professor of surgery, The University of Rochester School of Medicine and Dentistry and Strong Memorial Hospital, Rochester, New York

W. C. Shands, M.D., clinical associate professor of surgery, The University of Mississippi School of Medicine

George V. Smith, M.D., associate professor of surgery, The University of Mississippi School of Medicine

POSTGRADUATE / Continued

Akio Suzuki, M.D., associate professor of surgery, The University of Mississippi School of Medicine

Friday Morning

MASSIVE ESOPHAGEAL HEMORRHAGE: DIFFERENTIAL DIAGNOSIS AND EMERGENCY TREATMENT
Dr. Schwartz

MAJOR PROBLEMS IN INTESTINAL OBSTRUCTION
Dr. Barnett

ACUTE CIRCULATORY AND RESPIRATORY FAILURE: NEWER MANAGEMENT TECHNIQUES
Dr. Gabel

THE ISCHEMIC LIMB
Dr. Hardy

SURGICAL MANAGEMENT OF HEART ATTACKS
Dr. Suzuki

CURRENT OPERATIONS FOR BLEEDING PEPTIC ULCER
Dr. Conn

Friday Afternoon

THE DEVELOPMENT OF A SURGERY TEXTBOOK
Dr. Schwartz

SPLENECTOMY FOR HEMATOLOGIC DISEASE
Dr. Schwartz

ABDOMINAL EMERGENCIES OF THE NEWBORN
Dr. Miller

SURGICAL COMPLICATIONS OF PREGNANCY
Dr. Johnston

ACUTE RENAL SHUTDOWN IN SURGICAL PATIENTS
Dr. Bower

RENAL TRANSPLANTATION
Dr. Smith

LARGE NECK MASSES
Dr. Shands

Saturday Morning

CURRENT MANAGEMENT OF PERITONITIS
Dr. Barnett

POSTPHLEBITIC SYNDROME WITH ULCERATION
Dr. Chavez

PROBLEMS FOLLOWING CHOLECYSTECTOMY
Dr. Hardy

THE EARLY MANAGEMENT OF MASSIVE TRAUMA
Dr. Neely

THE MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Nov. 6-10, 1972

OBSTETRICS INTENSIVE COURSE
University Medical Center, Jackson
Nov. 6-10, 1972, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine with the support of the Mississippi Regional Medical Program

Coordinator:
Donald M. Sherline, M.D., associate professor of obstetrics and gynecology, The University of Mississippi School of Medicine

Participants will review current concepts of obstetrical practice, including fetal medicine, prenatal and intrapartum medical complications of pregnancy, and obstetrical anesthesia and analgesia. The one-week intensive course also features rounds, medical complications clinic, seminars and conferences.

The course is offered through the Mississippi Postgraduate Institute in the Medical Sciences, supported through Mississippi Regional Medical Program grant funds. The institute is a University Medical Center-Mississippi State Medical Association joint project. Registration is limited to five family physicians enrolled in the institute.

FUTURE CALENDAR

Nov. 3-4, 1972
SURGERY SEMINAR

Nov. 6-10
OBSTETRICS INTENSIVE COURSE

Jan. 22-26, 1973
GASTROENTEROLOGY INTENSIVE COURSE

Mar. 7
RENAL SEMINAR

Apr. 30-May 3
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

Miss. Ob-Gyn Society Meets

The annual fall meeting of the Mississippi Obstetrical and Gynecological Society was held Oct. 7 at the University Medical Center in Jackson.

President Walter L. Bourland of Tupelo presided and the welcome was given by Dr. Robert E. Blount, UMC director and dean.

Dr. James Arens of Jackson, UMC anesthesiology professor and chairman, discussed general anesthesia and obstetrics. Dr. Phillip E. Cranston, radiology resident at the medical center, talked on hysterosalpingography. Special guest speaker was Dr. Dale R. Dunnihoo, Col. USAF, Ob-Gyn chairman at Keesler Air Forse Base in Biloxi, who spoke on fetal monitoring.



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WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

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the analgesic formula that calms instead of caffeinates

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Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

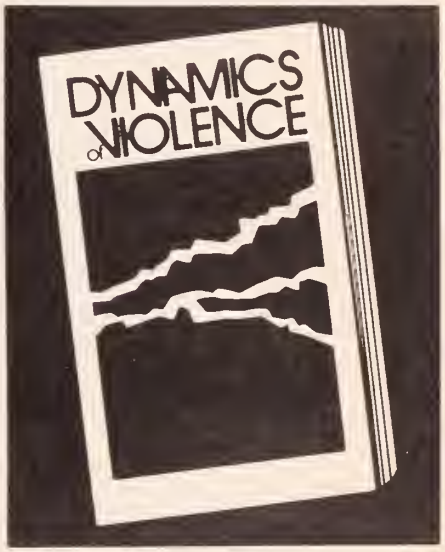
Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

(III) Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

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SMJ 11/72

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Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

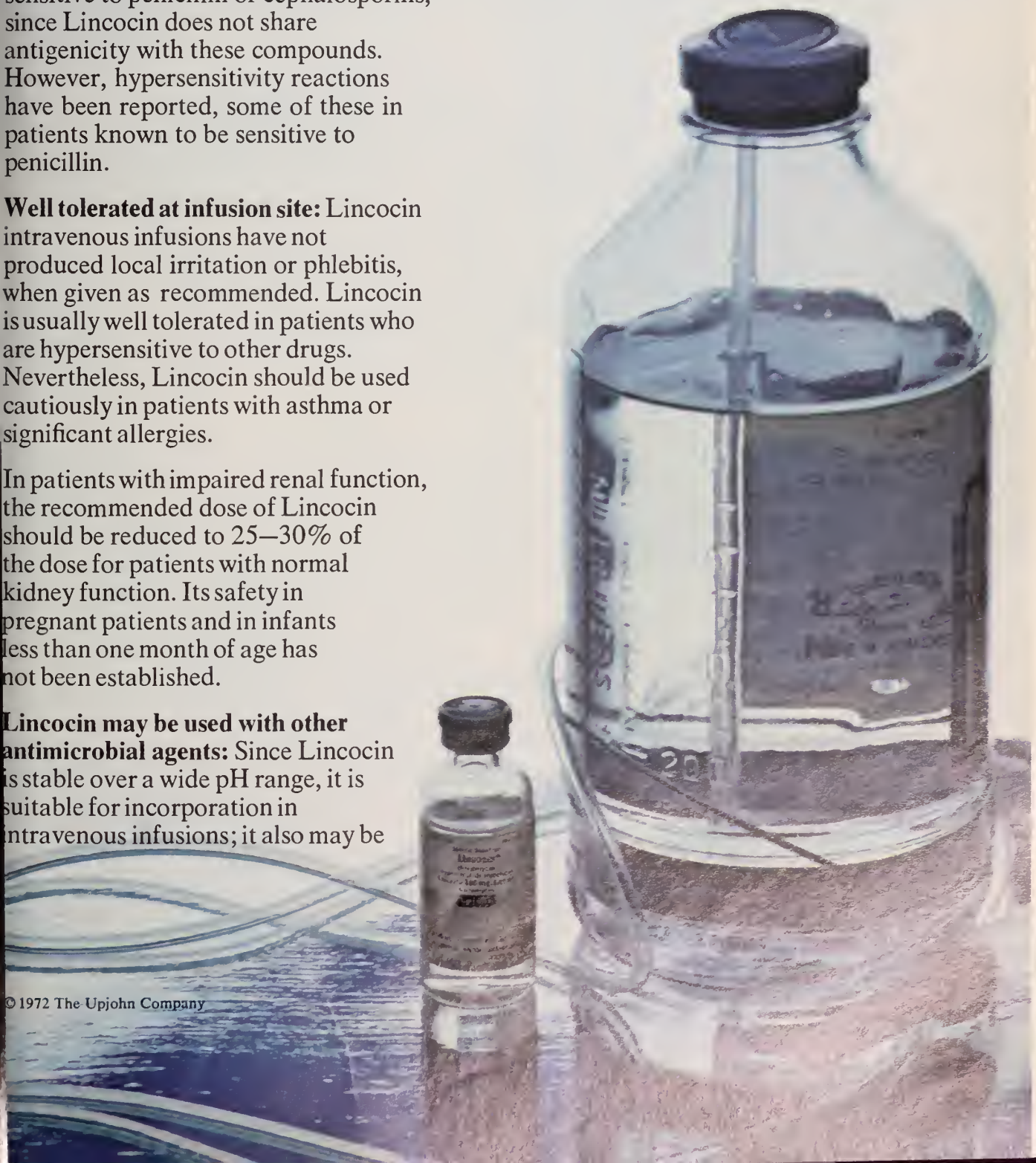
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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Book Reviews

Introduction to Neuroscience. Edited by Jeff Minckler, M.D., Ph.D. 420 pages with 661 illustrations. St. Louis: The C. V. Mosby Company, 1972. $22.50.

With the shift of medical education to the use of core curricula, many medical schools have grouped the basic sciences related to the nervous system into the neurosciences. This book is an introduction presumably for medical students in the neurosciences. A text in this area ideally should cover basic neuroanatomy, neurophysiology, neuropharmacology and neurochemistry and relate them to each other. This volume is an attempt at such coverage. The neuroanatomy sections, about 80 per cent of the book, are written by the editor. Perhaps too much time is devoted to cellular elements of the nervous system, but in general the neuroanatomy is modern, concise, correct and replete with new thoughts and ideas and ways of looking at the nervous system that should help the student. Clinical diagnostic testing procedures such as the myelogram, electroencephalogram, electrocorticogram and their relation to the anatomy and physiology of the nervous system are included.

The four chapter section on functional neuroscience includes chapters on neurochemistry, electrophysiology and experimental neurobiology and one on functional organization and maintenance. The first three are written by separate authors and the fourth by the editor. It is perhaps a nearly impossible task at this time to relate such components to each other and to the book as a whole and the task remains unaccomplished in this volume. The coverage of the neurosciences other than neuroanatomy in addition seems inadequate in relation to the good coverage of neuroanatomy.

It is felt by the reviewers that one could recommend this as a book to be used as a review of neuroanatomy for the graduate student or physician, but its lack of completeness in the neurosciences other than anatomy would make it inadequate as a neurosciences text in its present form.

The book is well done with readable type and many sharp, clear illustrations.

ROBERT D. CURRIER, M.D., and
BEN R. CLOWER, Ph.D., Jackson, Miss.

Lasers in Medicine. By Leon Goldman, M.D., and R. James Rockwell, Jr. 385 pages with illustrations. New York: Gordon and Breach Science Publishers, Inc. 1971.

The laser generates an enormously intense light beam which is highly collimated and as a result can be focused very precisely. Precision is also one of the requirements of delicate surgery. In addition, one of the major difficulties with a surgeon is control of hemorrhage. Thus, if the laser could prevent or minimize bleeding, it would be of enormous value. Therefore we add two key properties which may suggest that laser radiation could be of value as a surgical instrument: precision and the possibility of bloodless surgery. Controls must always be used to evaluate the lasers. In brief, these controls include regular scalpel surgery, high frequency electrodesurgery, and occasionally, cryosurgery. The surgeon is always looking for improvements in techniques and he now has experimental models of a laser at his disposal. The question is, "Is it of any value?"

This text is generally of a very technical nature. Only in the chapter dealing with ophthalmology do the authors point out any actual use of the laser aside from an investigative procedure. Chapters on the physics of laser emission, laser devices and characteristics of laser radiation are much too technical to have clinical application.

In summary, the text provides the useful broad background and bibliography for the technician or the investigative physician interested in this field. It has very little to offer anyone who would use it to find information for the clinical application of the evolving laser instruments.

RICHARD L. BLOUNT, M.D., Jackson, Miss.

Pinworm therapy is often a family affair



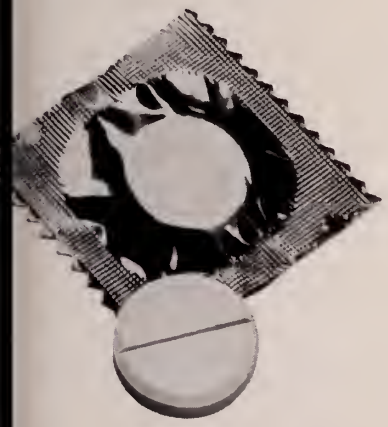


Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg Mintezol®

THIABENDAZOLE | MSD)



so easy to take
everyone in the family
can keep to the
regimen you prescribe

clude: fever, facial flush, chills, conjunctival injection,
gioedema, anaphylaxis, skin rashes, erythema multiforme
ncluding Stevens-Johnson syndrome), and lymphadenopathy.
upplied: Chewable tablets, containing 500 mg thiabendazole,
boxes of 36, strip packaged, individually foil wrapped;
uspension, containing 500 mg thiabendazole per 5 cc, in
ottles of 120 cc.

or more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.
The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).
MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.
The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

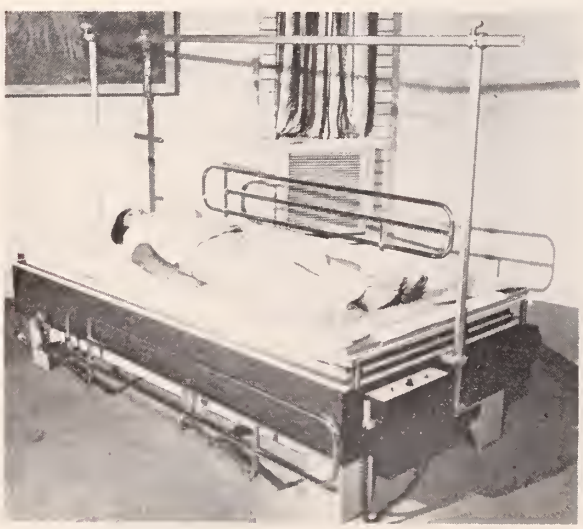
*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

Air-Fluidized Bed Is Introduced

Milton Roy Company, St. Petersburg, Fla., has announced a new Royalaire air-fluidized bed for home and hospital use. This unique patient support system has been redesigned with attractive, modern lines, and is available at lower prices than earlier models. The bed now meets the needs of today's modern hospital requirements for patient care and safety.

Proven to be effective in the cure of decubitus ulcers, the new bed is designed to be a therapeutic device especially responsive to today's health requirements.

Major savings of up to 80 per cent in nursing costs have been reported at hospitals using the bed. In the case of decubitus ulcers, this bed makes it unnecessary to turn a patient, so nursing time is conserved considerably and may be directed to other duties. Also, patients lying in the bed are generally more comfortable, less demanding, and require the least necessary amount of attention. Sedation requirements are usually reduced.



Milton Roy Company announces its new Royalaire air-fluidized bed for home and hospital use.

The patient care advantages of the bed result from the system's unique supportive qualities. In the bed, a patient literally floats in a temperature-controlled medium consisting of billions of tiny ceramic beads, through which gently flowing air passes. These air-fluidized beads exhibit all the characteristics of a liquid, except wetness, and provide completely uniform support for the patient's body with total elimination of pressure points.

A simple, functional control panel makes the new bed easy to operate while low sides reduce patient handling effort. The control console can be remotely located in situations where hazardous atmospheres prohibit its use.

Other products manufactured by the company include artificial kidney systems, heart assist devices, contact lenses, plastic spectacles, pollution monitoring equipment, controlled volume pumps, analytical instruments, and combustion control equipment.

Billy Guyton Fund Set Up

The University of Mississippi Medical Alumni Chapter, the University Medical Center and the Mississippi State Medical Association have joined forces to set up the Billy S. Guyton, M.D., Memorial Medical Education Loan Fund.

With an initial $10,000 contribution, medical alumni chapter president Dr. Bobby F. King of Iuka reports, some 20 loans of $500 will go to Mississippi medical students during the first year of the annual fund.

Established to honor a School of Medicine dean emeritus and past-president of the MSMA, the Guyton Fund is supported through member agencies and other interested individuals.

"Our goals are to perpetuate the ideals of Dr. Billy S. Guyton," explained Dr. King, "and to allow contributors to give financial assistance to other generations of medical students."

"We hope the establishment of the Guyton Fund," he added, "will pay tribute to a great Mississippian who devoted his life to enhancing the growth of his state."

Dr. Billy S. Guyton served as dean of the University of Mississippi School of Medicine from 1935 to 1944, when he was named dean emeritus. Following his retirement as dean, the otolaryngologist headed the Guyton Clinic which he had set up in 1915. He died in 1971 at the age of 87.

The medical educator held the B.S. and a posthumous honorary doctorate degree from Mississippi College, the M.A. from the University of Mississippi, the M.D. from the University of Virginia and the Oph.D. from the University of Colorado.

Association of Medical Clinics Taps Four Mississippi Clinics

The Street Clinic and the Vicksburg Clinic of Vicksburg and the Hattiesburg Clinic, P.A., and the Green Eye Clinic of Hattiesburg formally became members of the American Association of Medical Clinics at AAMC's 23rd annual meeting in Atlanta. The Mississippi clinics were four of 27 group medical practices received into membership.

A voluntary, non-profit organization, the American Association of Medical Clinics is the national spokesman for group practice physicians. The AAMC promotes improvement in health care delivery systems through the exchange of innovative ideas and developments in member clinics throughout the United States and Canada.

The association publishes *Group Practice*, a monthly professional journal, with a circulation of 109,000 physicians, a newsletter, and bulletins on special legislative and regulatory matters. It also provides a variety of services, many of which are not limited to members, but are available to all group medical practices in North America.

The association provides: a physician placement service, bringing together physicians seeking to enter group practice and clinics in need of physicians; a members' centralized research library; association-wide professional insurance programs; liaison with government agencies involved in health care planning, annual and regional meetings; seminars and workshops, etc.

To assure continual evolution of higher quality in medical care, the association's activities include a vital and effective accreditation program. Upon the request of a group practice, the AAMC assigns a team of physicians, administrators, and national office staff, to survey and evaluate the clinic's overall operation to determine and, where necessary, upgrade the quality of medical care delivered to the clinic's community.

Thirty-eight clinics received Accreditation Cer-



Dr. Earl W. Green of the Green Eye Clinic, P.A., Hattiesburg, receives AAMC Membership Certificate from Dr. William W. Hoffman, chairman, AAMC Certification Commission.



Dr. Karl W. Hatten of the Vicksburg Clinic, Vicksburg, receives AAMC Membership Certificate from Dr. William W. Hoffman, chairman, AAMC Certification Commission.



Dr. K. Ramsay O'Neal of the Hattiesburg Clinic, P.A., Hattiesburg, receives AAMC Membership Certificate from Dr. William W. Hoffman, chairman, AAMC Accreditation Commission.



Dr. Thomas B. Dominick of the Street Clinic, Vicksburg, receives AAMC Membership Certificate from Dr. Walter I. Buchert, AAMC president.

tificates at the Atlanta meeting, making a total of over 70 clinics accredited since the four-year-old program's inception.

The next annual meeting of the AAMC will be held in Los Angeles, Cal., Sept. 16-20, 1973.

Opening doors for the handicapped involves more than just being polite.

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PAS

PUBLIC ADVERTISING SYSTEM
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Dr. J. T. Nelson Is SMA President-elect

Dr. Joe T. Nelson of Weatherford, Tex. has been named president-elect of the Southern Medical Association.

He fills the vacancy created by the death of Dr. Edgar Boling of Atlanta, who died recently following a prolonged illness.

A graduate of Baylor University College of Medicine, Dr. Nelson is past councilor of Southern Medical Association and is a lifetime member. He has also served the Texas Medical Association as a member of the Board of Trustees, past immediate chairman on Medical Jurisprudence, member of the Executive Board and vice chairman of the Texas delegation to the AMA.

Aside from being an active general practitioner, Dr. Nelson has held a number of professional and civic positions of responsibility. He is a member of the University of Texas System Board of Regents, charter member and past chairman of the Board of Directors of the Texas Medical Association Political Action Committee and also a member of the Board of Directors of the American Medical Association Political Action Committee. He was chairman of the National Affairs Committee of the West Texas Chamber of Commerce, and was named outstanding citizen of Weatherford in 1963. In 1970 he received the Distinguished Service Award of the Southern Medical Association.

Neurotology Course Set for Chicago

The department of otolaryngology of the Abraham Lincoln School of Medicine and the University of Illinois Hospital Eye and Ear Infirmary, University of Illinois at the Medical Center, will conduct a continuing education course in neurotology Mar. 26-29, 1973.

This four-day intensive course will offer a didactic and practical review of clinical neurotology under the direction of Dr. Nicholas Torok.

It will be held at the Eye and Ear Infirmary and will include basic vestibular physiology and pathophysiology, commonly used testing methods applied in functional examination of the vestibular organ.

In addition, various forms of caloric testing procedures will be demonstrated using nystagmography, reading and evaluation of the test results, particularly the nystagmogram, and correlation with audiometric and neurologic findings, final neurotological diagnosis, management and treatment. Patients will be tested by participants and the history. symptoms and test results will be discussed in informal conferences.

Enrollment is limited to 12. For application forms write to the department of otolaryngology, 1855 West Taylor Street, Chicago, Ill. 60680.

Medicaid Issues Support Data

Aaron J. Johnston, director, Hospital and Professional Affairs Division and Medicare-Medicaid Coordinator has issued support data for Regular and Reserve Day Claims to all Medicaid participating hospitals and physicians.

On Mar. 6, 1972, a bulletin from the Mississippi Medicaid Commission was distributed to hospitals and physicians regarding review of claims for medical necessity and establishment of the 20 Regular/20 Reserve Day Program. The bulletin indicated that determination of coverage would be based on full review of hospital records. The Medicaid Commission bulletin was supplemented on Mar. 21, 1972, by the Mississippi Hospital and Medical Service Medicaid Bulletin No. Hosp. 72-4 regarding "Procedures for Handling the 20 Regular Day and 20 Reserve Day Split." The bulletin stipulated that the following seven items be submitted with Reserve Day claims: (1) Admitting physical and history, (2) Doctors' orders, (3) Progress notes, (4) Nurses' notes, (5) Operative & anesthesia reports, (6) Laboratory & radiology reports, and (7) Discharge summary.

After several months of experience with the current system, a staff of professionals, comprised of physicians and registered nurses, feels that in most cases the case review information could be limited to the Admitting Physical and History and the Discharge Summary. Therefore, as a matter of routine for all subsequent Reserve Day claims, send copies of only the following: Admitting Physical, Admitting History, and Discharge Summary. In certain instances when the above documents are considered illegible, incomplete, or inadequate, it will be necessary for the provider to submit additional information.

As outlined in the Medicaid Commission Bulletin of Mar. 6, 1972, only hospital admissions for which a clear medical necessity is evident will be covered for payment. No patient will have "Regular" hospital days beyond 20 days per fiscal year. "Reserve" days (maximum of 20) may be used if an emergency should exist.

Admissions occurring within the Regular 20 day per fiscal year period are reviewed for determination of payment using the following criteria:

(A) Inpatient services rendered that could reasonably be provided on an outpatient basis. Example: Diagnostic studies.

(B) Medical conditions that could be safely and reasonably handled on an outpatient basis. Example: Uncomplicated URI's, viral diarrheas, headaches, backaches, etc.

(C) Overutilization of hospital days for uncomplicated diagnosis. Example: Normal vaginal deliveries, simple T & A's, appendectomies, etc.

Medical information is requested for Regular Day claims only when it is necessary to determine the medical necessity of the admission.

Admissions involving "Reserve Days" are covered only when emergency conditions exist such as heart attacks, acute pulmonary edema, broken bones that require operative management, intestinal obstructions, strokes, etc. No admission for elective surgery will be covered during the "Reserve Day" period. Medical information, Admitting History and Physical, and the Discharge Summary should routinely be attached to any Reserve Day claim that meets the emergency admission criteria. Additional information may be requested if the reviewing professional staff determines it necessary in order to substantiate the claim.

Questions concerning this bulletin should be directed to the Medicaid Claims Department, Mississippi Hospital and Medical Service.

SBH Offers Flu Vaccine

"The annual effort aimed at controlling influenza is underway once again," says Dr. Hugh B. Cottrell, State Health Officer.

According to Dr. Durward Blakey, director of Preventable Disease Control, State Board of Health, "local health departments are contacting patients already enrolled in county health programs and urging them to take advantage of the flu shots available at local health centers."

A highly purified influenza vaccine, "Influenza Virus Vaccine, Bivalent," has been secured for use this year.

"Approximately 50,000 doses have been administered throughout the state," said Dr. Blakey.

A widespread occurrence of flu is expected again this year, and health department officials urge the public to get properly vaccinated, particularly the older people and those who are unusually susceptible to sickness.

Anticonvulsant Blood Levels Determined

The University Medical Center has recently set up facilities for determining blood levels of the major anticonvulsants. This activity has received the support of developmental disability program funds administered through the Mississippi Interagency Commission on Mental Illness and Mental Retardation.

Analyses for Dilantin, Phenobarbital and other commonly used anticonvulsants are now performed in the laboratory of the division of neurology at the University Hospital in Jackson. These analyses will help the physician control seizures in patients with the more refractory types of epilepsy by insuring that they are absorbing from the G.I. tract adequate amounts of anticonvulsants. It will also help in the identification of toxicity from over-dosage or over-absorption of these compounds.

Physicians throughout the state of Mississippi wishing to have blood level determination of anticonvulsants done for their patients may obtain this service free of charge by contacting the Neurology Laboratory, University Hospital at phone number 362-4411, extension 2578, for details.

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated. Usage in pregnancy.** (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The antianabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal diseases, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes, exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections, an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, Rondomycin (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of Rondomycin (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: Rondomycin (methacycline HCl) 150 mg and 300 mg capsules, syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 12/71

WALLACE PHARMACEUTICALS
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When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

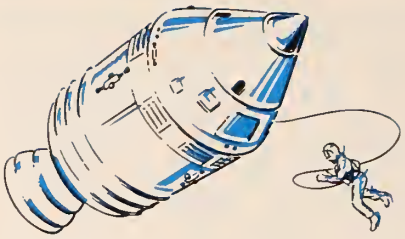
Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

Studies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended.



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

SMA Plans 66th Annual Meeting

The 66th Annual Meeting of the Southern Medical Association (SMA) is scheduled for Nov. 13-16 at The Rivergate Convention Center in New Orleans.

Held annually to keep physicians abreast of new methods, medicines, research findings and advances in equipment and technology, the conference will offer a wide scope of medical and scientific programs.

Distinguished guest speakers and scientific and technical exhibits will highlight this conference where physicians from throughout the South gather to hear more than 300 lectures covering all phases of medicine. Physicians will also take part in panel discussions.

Among the distinguished speakers are Dr. William H. Masters and Dr. Virginia E. Johnson, both of St. Louis, Mo.; R. J. Heald, M.Chir., F.R.C.S. of London, England; Dr. Charles S. Lieber of New York City; Dr. M. Roscoe Lowery of Atlanta and Dr. John F. Mullan of Chicago. Overall, there will be 21 guest speakers.

Special symposia on scientific writing, head and neck injuries, inhalation therapy, the philosophy and format of rapid treatment of sexual dysfunction, and gallstone diseases will be held.

An important activity will be the Lunch and Learn sessions, on Nov. 13 and 15, sponsored by the various specialty sections. The sessions will feature outstanding moderators and topics of interest to all physicians.

Several distinguished medical groups will be meeting conjointly with SMA. The groups are the Southern Chapter of the American College of Chest Physicians, Civil Aviation Medical Association, American Fertility Society, Radiological Society of North America and Southern Gynecological and Obstetrical Society.

Besides the medical and scientific portion of the convention, several social functions have been planned for SMA members. A golf tournament, alumni reunions, special activities for the Woman's Auxiliary and the President's Dinner Dance on Nov. 13, all will give the visiting physicians a chance to relax as well as work.

Officers of the SMA are J. Hoyle Carlock of Ardmore, Okla., president; Joe T. Nelson, Weatherford, Tex., president-elect; George J. Carroll of Suffolk, Va., first vice president; Walter C. Jones, III of Miami, second vice president; Robert F. Butts of Birmingham, Ala., executive director and R. H. Kampmeier of Nashville, Tenn., editor of the *SMA Journal.*

General chairman of the convention is Dr. Woodard D. Beacham of New Orleans.

The SMA annual meeting is open to all physicians, residents, interns, medical students, nurses, technicians and other paramedical personnel. There is no registration fee.

Inquiries should be addressed to Southern Medical Association, 2601 Highland Avenue, Birmingham, Ala. 35205.

MRMP Gives New Contract Awards

Nine contractual activities have gained Mississippi Regional Medical Program RAG Executive Committee approval for funding in Fiscal Year 1973, including five that will support the development of Comprehensive Health Planning "b" Agencies in Mississippi.

The contracts and their funding levels are: (1) *Hypertension Screening* (Mississippi Heart Association)—$12,500; (2) *Develop an Emergency Medical Service System in an Eight-County Area* (Mercy Hospital-Street Memorial)—$10,000; (3) *Comprehensive Health Planning Emergency Medical Service*—$10,000; (4) *Lee County Emergency Service*—$10,414; (5) *MedLine/Library* (physician-health profession reference center)—$4,200; (6) *Professional Staff Automobile*—$5,000; (7) *EMCRO/Quality Care Manual* (Mississippi State Medical Association)—$5,750; (8) *MRMP Manpower and Education Task Force Learning Center:* equipment—$15,000; and (9) *CHP "b" Agency Development* (five contracts @ $10,000)—$50,000.

Supporting completion of the organizing of CHP "b" agencies in the state became the second of five objectives under program Goal II ("design systems of health care with equity of access, at reasonable costs, to all citizens") last winter. With the signing of the five $10,000 contracts by state CHP head Dr. Lindsey Risher, that objective becomes a great deal closer to being fully realized.

Four additional contracts proposed to MRMP have received consideration by the Executive Committee. Action on them will be delayed until the most appropriate source of funding can be determined. It is likely that money for these activities will be made available from the program budget at a later period in our fiscal cycle. The four contracts are: (1) *Acute Care Wing* (UMC—planning), (2) *Communications Disorders Lab* (UMC), (3) *Video Tape Equipment* (program staff), (4) *EKG Computer* (UMC).

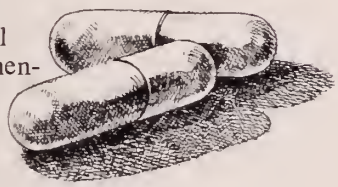
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Helps reduce anxiety-related G.I. symptoms

A patient may blame his attacks of gastritis or duodenitis on "something he ate" but contributing factors may be his job, marital problems, financial worries or some other unmentioned source of stress and excessive anxiety that exacerbated the condition. Whether it is "something he ate" or "something eating him," adjunctive Librax can help. Librax offers both the antianxiety action of Librium® (chlordiazepoxide HCl), that can help relieve excessive anxiety, and the dependable anticholinergic action of Quarzan® (clidinium Br), that can help reduce gastrointestinal hypermotility and hypersecretion.



Patient-oriented dosage – up to 8 capsules daily in divided doses

For optimal response, dosage can be adjusted to suit patient needs—1 or 2 capsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

adjunctive

Librax®

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Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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IRS Clarifies M.D. Wage-Price Controls

The Internal Revenue Service has issued publication S-3015 (6-72) of the Economic Stabilization Program which covers economic controls for doctors and dentists.

The Price Commission had issued regulations to control the rate of inflation in the health services industry on Dec. 31, 1971. These regulations are based on the recommendations of the Committee on the Health Services Industry, a 21-member advisory panel appointed by the president.

Self-employed doctors and dentists are covered under the section of the regulations dealing with noninstitutional providers of health care services. This section sets down guidelines governing prices and profit margins, and requires that certain price information be made available to the public.

The fees of self-employed doctors and dentists are considered prices under the regulations, not wages. Price Commission regulations require a doctor or dentist to charge no more for a service than the base price of that service, unless certain economic tests can be met.

Generally, the base price of a service is the highest fee the doctor or dentist could charge for that service Aug. 16 to Nov. 13, 1971. For most doctors and dentists this would be the highest fee at or above which 10 per cent of the transactions involving the service were priced for a class of purchasers during the freeze base period. The freeze base period is July 16 to Aug. 14, 1971, unless there were no transactions during that time. In that event the freeze base period is the nearest preceding 30-day period in which there was a transaction.

> For example: Between July 16 and Aug. 14, a doctor performed 30 general physical examinations on regular patients. His fee was $25 to two patients, $20 to eight patients, and $15 to 20 patients—with no difference in the service. Since base price is the highest price at or above which 10 per cent of the transactions were priced, the top three fees must be taken into account—two at $25 and one at $20. This doctor's base price for a general physical exam is $20, the lowest of the top 10 per cent fees.

If a doctor's or dentist's costs increase, he may pass on some of those cost increases to his patients in the form of higher fees.

To be passed on, costs must be considered allowable by the Price Commission, must have been incurred either since the last price increase for the service or after Jan. 1, 1971, whichever was later, and must be continuing rather than one-time expenses. In addition, costs must be reduced to reflect productivity gains before they may be used to adjust a price.

How much of these cost increases may be added on to prices is limited by two factors: one is profit margin; the other, the amount of the doctor's or dentist's aggregate annual price increase.

An increase in price may not result in a percentage rise above the weighted average profit margin of any two of a doctor's or dentist's last three fiscal years ending before Aug. 15, 1971. If profit margin was 10 per cent, it must remain 10 per cent. (In those situations where services are not provided on a profit-making basis, net revenues—after deducting operating expenses and depreciation—as a percentage of total revenues may not be increased over that of any two of the last three fiscal years ending before Aug. 15, 1971.) No provision is made in the regulations for profit margin adjustment if losses have been experienced in the last few years. If he wishes, the doctor or dentist in a loss situation may seek relief by applying for an exception. The appropriate forms for making an exception application may be obtained at Internal Revenue Service offices.

Regardless of the extent of cost increases, the aggregate price increase of a doctor or dentist is limited to 2.5 per cent a year. An individual price increase may exceed 2.5 per cent as long as all price adjustments do not raise a doctor's or dentist's revenues more than 2.5 per cent over what they would have been had he charged base prices for all services throughout the year; and as long as the increase is cost justified and profit margin is not increased. For example, a 5 per cent price increase, based on a 5 per cent cost increase, for a service which produces only 10 per cent of revenues would not increase profit margin. Since only 10 per cent of revenues are affected, 5 per cent might be an allowable price adjustment depending on other price adjustments made or planned. If allowable costs have increased to such an extent that a doctor or dentist wishes to increase his prices above the 2.5 per cent limitation, he must apply for an exception.

Every doctor and dentist must have a price schedule available for public inspection in each

of his offices. The schedule must show base prices for principal services, and each change in such a price. A copy of the schedule must be furnished to a representative of the Internal Revenue Service or the Price Commission upon request.

In addition, a sign stating the availability of the schedule and its location must be posted in each office. No specific size or wording is required for the sign, but it should be large enough to readily inform the public of the required data.

No price may be increased before the sign is posted and the schedule is made available for public inspection. A reduction in quality or quantity of service with no accompanying decrease in fee is as much a price increase as the raising of a fee with no change in the service.

If a group of doctors or dentists have formed a professional corporation and are practicing employees of it, rather than practicing on a self-employed basis, the fees of the corporation are subject to the same pricing rules as a self-employed doctor or dentist—including the 2.5 per cent price increase limitation. However, the doctors' or dentists' salaries, if employees of the corporation, are subject to Pay Board rather than Price Commission regulations. Wage increases must be judged against the Pay Board's 5.5 per cent general wage and salary standard.

Army, Navy Appoint CHAMPUS Advisors

Individuals who can provide detailed information on CHAMPUS are now at military installations everywhere.

The Navy recently has required that Health Benefits Counselors be appointed at all medical facilities having one or more medical officers. Previously counselors were appointed only at Navy hospitals.

The Army has also strengthened its health information program by assigning the primary responsibility for providing CHAMPUS information and assistance to the medical facility at each installation. The Army has required installations to provide information to CHAMPUS beneficiaries for some time but until now it has not required that a specific office be used. In addition, the Army is also requiring that the title "CHAMPUS Advisor" be given to these offices.

At those installations where no medical facility exists, a CHAMPUS Advisor still is required although he must seek guidance from a nearby uniformed services medical facility or from OCHAMPUS.

In their actions both the Army and Navy are following the lead of the Air Force, which has had designated CHAMPUS Advisors at all its installations for some time.

Each CHAMPUS Advisor and Health Benefits Counselor maintains appropriate informational material, provides counselling on the Uniformed Services Health Benefits Program, and coordinates a local information program. It is envisioned that these offices will serve as CHAMPUS information centers where beneficiaries can receive guidance in using the program.

U. S. Infant Mortality Is at Record Low

The infant mortality rate in the United States dropped to 18.6 per 1,000 live births for the first half of 1972—the lowest rate ever recorded, according to a National Center for Health Statistics report.

The declining rate continues a longtime trend. The 19.2 figure for 1971 also was a record low.

The rate for the first half of 1972 is 4.5 per cent below the 19.5 recorded for the similar period of 1971.

"All of us hope for an irreducible minimum rate of infant mortality, whatever that might be," said Dr. Carl A. Hoffman of Huntington, W. Va., president of the American Medical Association. "Medicine is doing and can do much in this area —for example, better pre- and postnatal care is important, and we need more intensive care units for newborns.

"But if we really want to solve this problem we must mount a real effort to rid this nation of poverty conditions. Nothing less will do the job."

Infant mortality in the U. S. has dropped steadily since 1940, when the rate was 47 per 1,000 live births. By 1950 the figure was down to 29.2. It was 26.0 in 1960 and 19.8 in 1970.

A sharp difference continues to be noted between infant mortality statistics for whites and those for nonwhites. In 1940, for example, when the overall rate was 47, it was 43.2 for whites but 73.8 among nonwhites. In 1971, the rate was 16.8 for whites and 30.2 for blacks and others.

The difference primarily reflects, medical authorities say, the lower economic status of nonwhites, in comparison with whites as a whole. Only by improving people's living standards—through better nutrition, housing, employment, etc.—will infant mortality be lowered to a truly irreducible minimum, they say.

Illinois University Expands Campuses

The University of Illinois College of Medicine is expanding off-campus and cutting costs thereby, according to an article in *American Medical News,* published by the American Medical Association.

The program, which began when the school was reorganized two years ago, uses existing community facilities in Rockford and Peoria for off-campus branches of the university and invites community members and physicians to share in planning and teaching.

The curriculum has been shortened to allow students to take their first-year basic science program in Chicago or Urbana and a three-year clinical program in Chicago, Rockford or Peoria. Executive Dean William J. Grove says the Metropolitan Hospital Group, which is made up of Chicago hospitals MacNeal Memorial, Mercy, Illinois Masonic, Ravenswood, Weiss Memorial and Lutheran General, may be a fourth clinical school in the future.

If all goes according to plan, the College of Medicine will double its first-year enrollment—from 959 to 1,978—by 1980.

The Peoria School of Medicine admitted its first sophomore class this month, using existing facilities at the Bradley University campus and at community hospitals in Peoria. According to Dean Nicholas J. Cotsonas, Jr., 205 of some 300 physicians in the region have indicated an interest in appointments as clinical associates.

The Rockford School of Medicine, which admitted its first students last September, also utilizes existing facilities and practicing physicians in a curriculum that is designed to take the place of the second, third and fourth years of the more traditional medical school. The fourth year is hospital oriented, with students performing tasks usually assigned to physicians in their first year of residency. The school hopes some specialties will recognize this as part of a residency, thereby cutting a year from the education program.

Rockford is also sponsoring a program of community health centers which will provide health care in communities where it is urgently needed and give undergraduates additional practical experience.

Two faculty members and 10 students will staff the centers, and students will be assigned patients from the community in a private practice setting under the supervision of a practitioner. Twelve communities have contacted the school to ask for centers in their area; two have been established, and 13 more are being planned.

Dr. Grove says the university's new concepts have been criticized by traditionalists, but he said, "If I were to make a prediction, it would be that a great many medical schools will follow our example."

UMC Begins Physicians' Assistant Program

A newly-established physicians' assistant training program is under way at the University of Mississippi School of Medicine this fall.

Approved by the Board of Trustees, Mississippi Institutions of Higher Learning, at the September meeting, the program is a joint project of the School of Medicine surgery department, the University of Mississippi School of Health Related Professions and Hinds Junior College.

Physician's assistants, as defined by the American Medical Association, are skilled persons qualified by academic and practical training to provide patient services under the supervision and direction of a licensed physician responsible for the performance of that assistant.

The national emphasis on this clinical specialty is a response to both the desire of military-trained medics to use their skills in civilian life and the urgent need for their supportive abilities as health paraprofessionals.

The Mississippi physician's assistant program is funded through a $105,076 grant from the Bureau of Health Manpower Education, Office of Special Programs, U. S. Department of Health, Education and Welfare.

A two-year curriculum, the course is designed to meet Association of American Medical Colleges and American Medical Association criteria. Goal is to furnish, through academic courses and clinical experience, basic medical knowledge and skills needed to aid the physician.

Students will take liberal arts and basic science courses at Hinds Junior College and go through clinical rotations at the University and Veterans Administration hospitals.

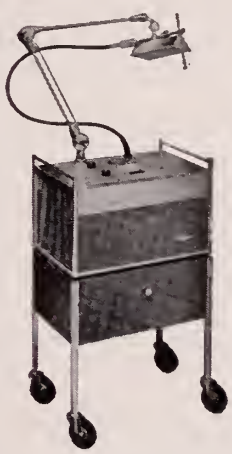
High school graduates who have either completed two years as a medical corpsman in a military service or completed two academic years in an accredited college are eligible for admission. The first class, beginning this fall, will have a maximum enrollment of 12 students.

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Index to Advertisers

American Medical Association 476C
Arch Laboratories, Div. Lewis Howe Co. 18

Beecham-Massengill Pharm. 10B
Burroughs Wellcome 468A

Geigy Pharmaceuticals 10, 10A, 472A

Hill Crest Hospital 8

Kay Surgical, Inc. 19

Eli Lilly and Company front cover, 18D, 464A, 464B

Merck Sharp and Dohme 478, 479
MPAC 19

PAS 482

Pharmaceutical Manufacturers Association 18A, 18B, 18C
Wm. P. Poythress and Co. 484B

A. H. Robins Company 476A, 476B, 476C
Roche Laboratories
second cover, 3, 6, 7, 16, 17, 486, 487, fourth cover
J. B. Roerig and Company 14B, 15

G. D. Searle and Company 468B, 468C
Stuart Pharmaceuticals, Div. ICI America Inc. 472B

The Upjohn Company 468D, 476D, 476E, 476F

Wallace Pharmaceuticals 484, 484A
Warner-Chilcott Labs 14A
Woodward Academy 14

Thomas Yates and Company third cover

IN CONCLUSION

Special telephone service for physicians seeking information or guidance on Phase 2 price controls is provided now by the AMA. Just call (312) 527-1571, extension 434, and ask for Robert Walsh of the AMA Center for Health Services Research and Development. After closing hours, messages will be recorded so that call back answers can be made. AMA has received about 25 calls a week since establishing the service in August.

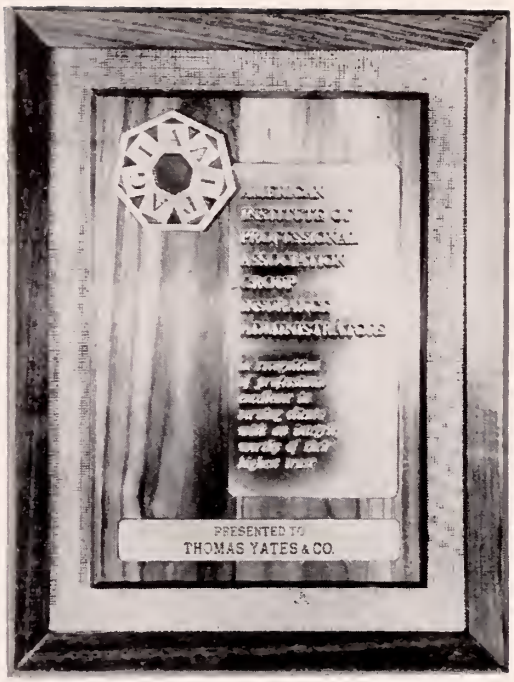
Physicians must comply with new Occupational Safety and Health Act, no matter how few employees they have. Law requires employer to fur nish a place of employment free from hazards that might cause injury or death. Safety standards set by U.S. Department of Labor are available from OSHA, Room 730-C, Mayflower Bldg., Dallas 75201. Re- cords must be kept of all occupational injuries; failure to comply could result in $10,000 fine and/or six month prison term.

Most Medicare reports and records would be open to public scrutiny under proposed Social Security Administration regulations published in Sept. 2 Federal Register. Proposed regulations outline types of information that would be available to public at SSA district office including reports prepared by a state agency on a particular facilit reports on performance of providers, and names of those found guilty habitual over-utilization or submitting false claims.

Pharmaceutical Manufacturers Association and Bureau of Narcotics and Dangerous Drugs are drawing up plans for a continuing working commit on industry self-regulation for prevention of drug diversion from legitimate manufacturers. Workshops will be held every two months t analyze current drug diversion problems and working subcommittees wi be created as needed to deal with specific problems. Agendas includ communication and information exchanges, security systems, etc.

In 1971, private practitioners recorded a record 1.5 billion patient contacts inclusive of contacts in office, hospital, and nursing home well as house calls and telephone contacts, according to National Disease and Therapeutic Index data on private medical care in U.S. Contacts in hospital setting increased by 5% while office visits de- clined by a comparable percentage. Contacts with children under 10 years of age declined while all other age groups increased.

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Will his return to work mean the return of undue psychic tension?



When it's mandatory to keep the post-coronary patient calm, consider Valium (diazepam).

Although he's promised to take it easy back on the job, you know he's going back to the same stressful circumstances that may have contributed to his hospitalization. If he experiences excessive anxiety and tension because of overreaction to stress, your prescription for Valium can bring relief. During the period of readjustment Valium can quiet undue anxiety.

For moderate states of psychic tension, 5-mg or 2-mg Valium tablets *b.i.d.* to *q.i.d.* can usually provide reliable relief. For severe tension/anxiety states, the 10-mg tablets often produce desired results.

The most commonly reported side effects are drowsiness, ataxia and fatigue. Until individual response is determined, caution patient against driving or operating dangerous machinery.

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Valium® (diazepam)

For the tense cardiac patient who must be kept calm

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults*: Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients*: 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children*: 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose ® packages of 1000.

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OF THE Mississippi

STATE MEDICAL ASSOCIATION

DECEMBER 1972

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This Month . . . Laparoscopy,

Venomous Bites and Stings in

Mississippi, Governor's Address





Everybody experiences psychic tension.



Most people can handle this tension.



Some people develop excessive psychic tension and need your counselin



and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

Valium®
(diazepam)

To help you manage excessive psychic tension

Counsel to Authors

The JOURNAL welcomes manuscripts which should be submitted to the Editors at 735 Riverside Drive, Jackson, Miss. 39216, in original and at least one duplicate copy. They must be typewritten doubled spaced on 8½ by 11-inch white bond paper with a standard typewriter.

The author is responsible for all statements made in his work, including changes made by the manuscript editor. Manuscripts are received with the understanding that they are not under simultaneous consideration by any other publication and have not been previously published. All manuscripts will be acknowledged, and while those rejected are generally returned to the author, the JOURNAL is not responsible in event of loss. Manuscripts accepted for publication become the property of the JOURNAL and are copyrighted by the association when published. They may not be published elsewhere without written release and permission from both the JOURNAL and the author.

All copy must be double spaced, including legends, footnotes, and references. Generous margins at the top, bottom, and on both sides of the page should be allowed. Each page after the title page should be consecutively numbered and carry a running head identifying the paper and author.

Titles should be short, specific, and clear. Ordinarily, a title should not exceed 80 characters, including punctuation.

References should be limited to a maximum of 10, but when justified to the Editors, additional references will be considered for publication. Each will be critically examined, and only valid, primary references will be published. Textbooks, personal communications, and unpublished data may not be cited as references. References must include names of authors, complete title cited, name of journal or book spelled out or abbreviated according to the *Index Medicus,* volume number, first and last page numbers, month, date (if published more frequently than monthly), and year. References should be arranged according to order listed in the text and must be numbered consecutively.

Manuscripts accepted for publication are subject to copy editing. Authors will receive galley proof prior to publication. Galley proof is only for correction of errors, and text changes may not be made. The galley proof should be returned by the author within 48 hours from receipt, and no further changes may be made after proof sheets are received by the JOURNAL.

Illustrations consist of all material which cannot be set into type such as photographs, line drawings, graphs, charts, and tracings. Illustrations should be submitted separately from text copy. Figures and drawings should be professionally prepared with black ink on white paper. Photographs should be of high resolution, unmounted, untrimmed, glossy prints. Each must be clearly identified. No charges are made to authors for illustration engravings not exceeding four column inches per printed page.

Illustrations must be numbered and cited in the text. Legends, not exceeding 40 words and preferably shorter, must accompany each illustration, typed double spaced on separate sheets. The following information should appear on a gummed label affixed to the back of each illustration: Figure number, manuscript title, author's name, and arrow indicating top of the illustration.

In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material.

A thesis summary of 75 to 100 words must accompany each manuscript separately from the text.

Reprints may be obtained at cost plus shipping charges from the association and should be ordered prior to publication. The JOURNAL reserves the right to decline any manuscript. Authors should avoid placing subheads in the text, and the Editors reserve the prerogative of writing and inserting subheads according to JOURNAL style. —*The Editors.*

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JOURNAL of the Mississippi STATE MEDICAL ASSOCIATION

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CONTENTS

ORIGINAL PAPERS

Laparoscopy **491** George R. Huggins, M.D., and Thano Exarchos, M.D., Jackson, Miss.

Venomous Bites and Stings in Mississippi **495** Hugh L. Keegan, Ph.D., Jackson, Miss.

SPECIAL ARTICLE

Radiologic Seminar CXXII: Orbital Blow-Out Fractures **500** Edward L. Gieger, M.D., Jackson, Miss.

EDITORIAL

Address of the Governor **503** The Honorable William L. Waller

THIS MONTH

The President Speaking **502** "Continuing Medical Education"

Medical Organization **511** Jackson Area Hospitals Add More Beds, Offer Specialized Facilities

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Ear Plastic Surgery Is Explained

"Facts About Plastic Surgery of the Ear" is the latest in a series of patient education folders prepared by the American Academy of Facial Plastic and Reconstructive Surgery, Inc., and is believed to be the only one of its kind dealing with this subject.

Questions about otoplasty, a common facial plastic operation, are often put to physicians who do not perform such surgery.

The information in the brochure is designed to fully inform the patient who is considering plastic surgery of the ear. It covers points that arise most frequently and indicates that the operation is most commonly performed on children.

Copies are available at cost to physicians who write: American Academy of Facial Plastic and Reconstructive Surgery, Inc., 1110 W. Main Street, Durham, N. C. 27701.

Rural Health Conference Scheduled

The 26th National Conference on Rural Health is scheduled for March 29-30, 1973, at the Statler-Hilton Hotel in Dallas.

The conference is sponsored by the Council on Rural Health of the American Medical Association in cooperation with other related organizations. The theme is "Rural Health—Innovation to Implementation."

For further information, write Bond L. Bible, Ph.D., Department of Rural Health, Division of Medical Practice, 535 North Dearborn Street, Chicago, Ill. 60610.

Medicare Announces Provider Ruling

Medicare providers must now file final cost reports with the Social Security Administration within 45 days from the time the provider terminates participation in the Medicare program or undergoes a change in ownership.

The new requirement became effective with regulations published in the *Federal Register* on Oct. 13.

Present Medicare cost reporting regulations are otherwise unchanged. The regulations currently require Medicare providers to submit an annual cost report covering a 12-month operating period. Selection of the period is up to the provider. It need not coincide with any 12-month period the provider has established for other purposes.

The 45-day deadline for filing final cost reports was adopted to protect the Medicare program by requiring the former providers to promptly fulfill their reporting obligations, Robert M. Ball, Social Security commissioner, explained.

An earlier proposal—to require that providers' Medicare cost reporting periods coincide with their IRS reporting periods and that they adopt IRS due dates for filing Medicare cost reports—was deleted from the regulations finally approved, Ball said. The Social Security Administration did not desire to burden providers with reporting requirements that might, in some instances, increase operating expenses. The deletion also took into consideration the fact that most participating providers that can do so effectively already use the same reporting year for both Medicare and IRS.

Artificial Lung Is Developed

The prototype of an artificial lung which could significantly improve the treatment of tuberculosis, emphysema and other lung disorders has been built at Carnegie-Mellon University.

This artificial lung, a membrane-type blood oxygenator, will make it possible for the first time to bypass the human lung for extended periods of time.

The project, currently funded by a $30,000 grant from the National Institutes of Health (NIH), is directed by Michael Weissman, assistant professor of bioengineering.

Dr. Weissman states: "At present there is no satisfactory method in medical practice to bypass the lungs for extended periods. Heart-lung machine systems which are used for surgery or other short periods involve direct contact between the oxygen and the blood, but such direct contact for a prolonged period results in serious damage to the blood.

"For some time now engineers have been working on membrane-type blood oxygenators which effect the transfer of oxygen and carbon dioxide indirectly through a membrane, but so far they have not been able to satisfactorily approximate the functions of the lungs. We have built a prototype membrane blood oxygenator which we feel is very promising."

The oxygenator would not be duplicating functions performed by lung support systems already in use, such as oxygen tents. Dr. Weissman says: "The oxygenator would be used, among other things, for patients with tuberculosis or emphysema, where it would be desirable to collapse and rest the lungs for extended periods, or for babies born with hyaline membrane disease, which they can survive if they can get through the first few critical days."

The system being developed by Dr. Weissman is considerably more efficient than other membrane oxygenators and very inexpensive. A complete lack of moving parts helps insure reliability and durability.

"To obtain the required gas-blood transfer efficiency," says Dr. Weissman, "we have designed what we call a layered plate oxygenator. It consists of several steel plate-membrane units stacked on top of one another. Each plate-membrane unit contains a steel plate etched on both sides, with a sheet of silicone rubber membrane covering each side. The blood is channeled through the etchings on the plate, and the oxygen-carbon dioxide transfer takes place through the membranes. Each plate-membrane unit is separated from the others by a layer of plastic casing.

"Through this compact structure we can obtain a flow rate four or five times higher than other membrane oxygenators with the same priming volume. Each plate-membrane unit can oxygenate 60 ccs of blood a minute.

"Because of the system's efficiency, it requires a very small priming volume—about 1.5 ccs of blood per plate side. This is an advantage in that the priming volume, or extra blood needed for the body's extended circulation system, must be made up by transfusion blood.

"Another promising aspect of our oxygenator is the low cost. The heart of the system is the etched plate, and we estimate these can be mass-produced for about five cents apiece."

Dr. Weissman expects to test the oxygenator on animals in the near future.

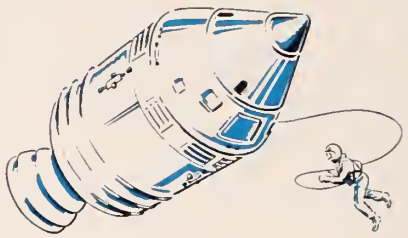
Opening doors for the handicapped involves more than just being polite.

Hire the handicapped.

PAS

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A DIVISION OF THE SCHOOL OF VISUAL ARTS

THE PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

NEWSLETTER

December 1972

ear Doctor:

ignificant increases in numbers of medical schools and in total enrollments f all medical schools were again reported during the 1971-72 school year, ccording to statistics included in the 72nd annual report of the AMA Council n Medical Education. First-year enrollment in 1971 increased by 1,013 to 2,361. Total enrollment was 43,650, an increase of 3,163 students over the revious academic year.

Increase was achieved both by opening new schools and by expanding enrollment at many of the existing schools. Total number of medical schools in the fall of 1971 was 108 and a total of 113 will be open by end of 1972-73 academic year. Graduates in June 1972 reached all-time high of 9,551.

orldwide sales of prescription drugs totalled $7.4 billion in 1971, an 8% ncrease over previous year's production and are expected to reach $8.1 illion by end of 1972, according to annual survey report of Pharmaceutical anufacturers Association. PMA member companies also indicated a 10.6% rise o $684 million in research and development expenditures.

MA-ERF Board of Directors awarded one-time grant of $15,000 to San Bernardino Calif.) County Medical Society to assist development of its Tel-Med program. el-Med is a tape library of health information accessible to the public by elephone. AMA-ERF also voted to provide (unrestricted) funds for AMA ducational and scientific programs.

ickle cell anemia crises are not triggered or associated in any way with he presence of fluorides in water, said Dr. Rudolph Jackson, coordinator of ational Sickle Cell Disease Program and chief of Sickle Cell Disease Branch f National Heart and Lung Institute of HEW. Statement was made to correct alse information appearing in newspapers.

igher fees are justified when physicians attain board certification, the rice Commission has ruled. The Commission advised a newly certified rologist that he could establish a new base fee structure at the level of verage base fees charged by other board-certified urologists in his rea.

Sincerely,

Nola Gibson

Nola Gibson
Managing Editor

MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 24-28, 1973, New York City. Clinical Convention, Dec. 1-5, 1973, Anaheim, Calif. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi Academy of Family Physicians, Annual Meeting, July 12-14, 1973, Biloxi. Mrs. Alyce Palmore, Executive Secretary, P.O. Box 12330, Jackson 39211.

Mississippi State Medical Association, 105th Annual Session, April 30-May 3, 1973, Biloxi. Charles L. Mathews, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, The Field Clinic, Centreville 39631, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Joel L. Alvis, 714 N. State St., Jackson 39201, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, P.O. Box 147, Port Gibson 39150, Secretary.

Clarksdale and Six Counties Medical Society, First Wednesday, May and November, 2:00 p.m., Clarksdale. Glenn L. Wegener, 1967 Hospital Drive, Clarksdale 38614, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. J. H. Gaddy, 4502 15th St., Gulfport 39501, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando 38632, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian 39301, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez 39120, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. John G. Downer, 110 Tchula St., Lexington 39095, Secretary.

Northeast Mississippi Medical Society, First Thursday, March, June, September, and December. Jack A. Stokes, 207 Holmes Rd., Pontotoc 38863, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford 38655, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. C. Griffing, Crosby Memorial Hospital, Picayune 39466, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main St., Columbus 39701, Secretary.

Singing River Medical Society, Third Monday, January, March, May, July, September, and November. Robert D. McBroom, 3102 Pascagoula St., Pascagoula 39567, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb 39648, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. Larry J. Hammett, 2601 Mamie St., Hattiesburg 39401, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 6:30 p.m., Magnolia Motor Motel, Vicksburg. Martin E. Hinman, The Street Clinic, Vicksburg 39180, Secretary.

Should old depressives be forgot?

geriatric depressive.
Unable to concentrate he tends
ke little interest in the affairs
nd him. His reactions are slow
delayed. He speaks very little.
n he does, it's mostly to com-
of his insomnia, fatigue, or
tipation.

One way of relieving depression in the geriatric patient is with Tofranil.

Please read the prescribing information for details of usage (lower dosages are recommended for elderly patients and adolescents), precautions, warnings, contraindications, adverse experiences, and dosage recommendations. It is summarized below.

Tofranil® Geigy
imipramine hydrochloride USP



il® imipramine hydrochloride USP

indications: The concomitant use of this agent
onoamine oxidase inhibiting (M.A.O.I.) com-
s is contraindicated. Hyperpyretic crises or
convulsive seizures may occur. Potentiation of
se effects can be serious or even fatal. An interval
east 14 days after M.A.O.I. therapy has been
tinued should be allowed before this drug may
stituted. Initial dosage should be low, increases
l be gradual, and the patient's progress should
efully observed. The drug is also contraindicated
ring the acute recovery period after myocardial
tion, (b) in patients with known hypersen-
y to the drug. Cross-sensitivity to other dibenz-
e compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of
mine during pregnancy and lactation has not
stablished; therefore, in administering the drug
gnant patients, nursing mothers, or women of
earing potential, the potential benefits must be
ed against the possible hazards. Animal repro-
n studies have yielded inconclusive results.
have been clinical reports of congenital mal-
tion associated with the use of this drug, but a
relationship has not been confirmed.
Extreme caution should be used when this drug
n to:
ients with cardiovascular disease because of the
sibility of conduction defects, arrhythmias,
ocardial infarction, strokes and tachycardia;
ients with increased intraocular pressure, history
rinary retention, or history of narrow-angle
ucoma because of the drug's anticholinergic
perties;
erthyroid patients or those on thyroid medica-
because of the possibility of cardiovascular
icity;
ients with a history of seizure disorder because
drug has been shown to lower the seizure
eshold;
ients receiving guanethidine or similar agents
e imipramine may block the pharmacologic
cts of these drugs.
Usage in Children: Pending evaluation of results
clinical trials in children, the drug is not recom-
ed for use in patients under twelve years of age.
ince the drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: Because of the possibility of suicide in seriously depressed patients, careful supervision during the early phase of treatment is necessary and hospitalization may be required. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, imipramine may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential.

Adverse Reactions: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation, insomnia and nightmares, hypomania, exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms. Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

How Supplied: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls each containing 25 mg. in 2 cc. for I.M. administration. (B 98-216-850-H 17 71)

For complete details, including dosage, please refer to the full prescribing information.

Geigy Pharmaceuticals
Division of Ciba-Geigy Corporation
Ardsley, New York 10502



When you select this familiar antibiotic for IV infusion you have available a broad dosage rang that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomyci hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in n less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

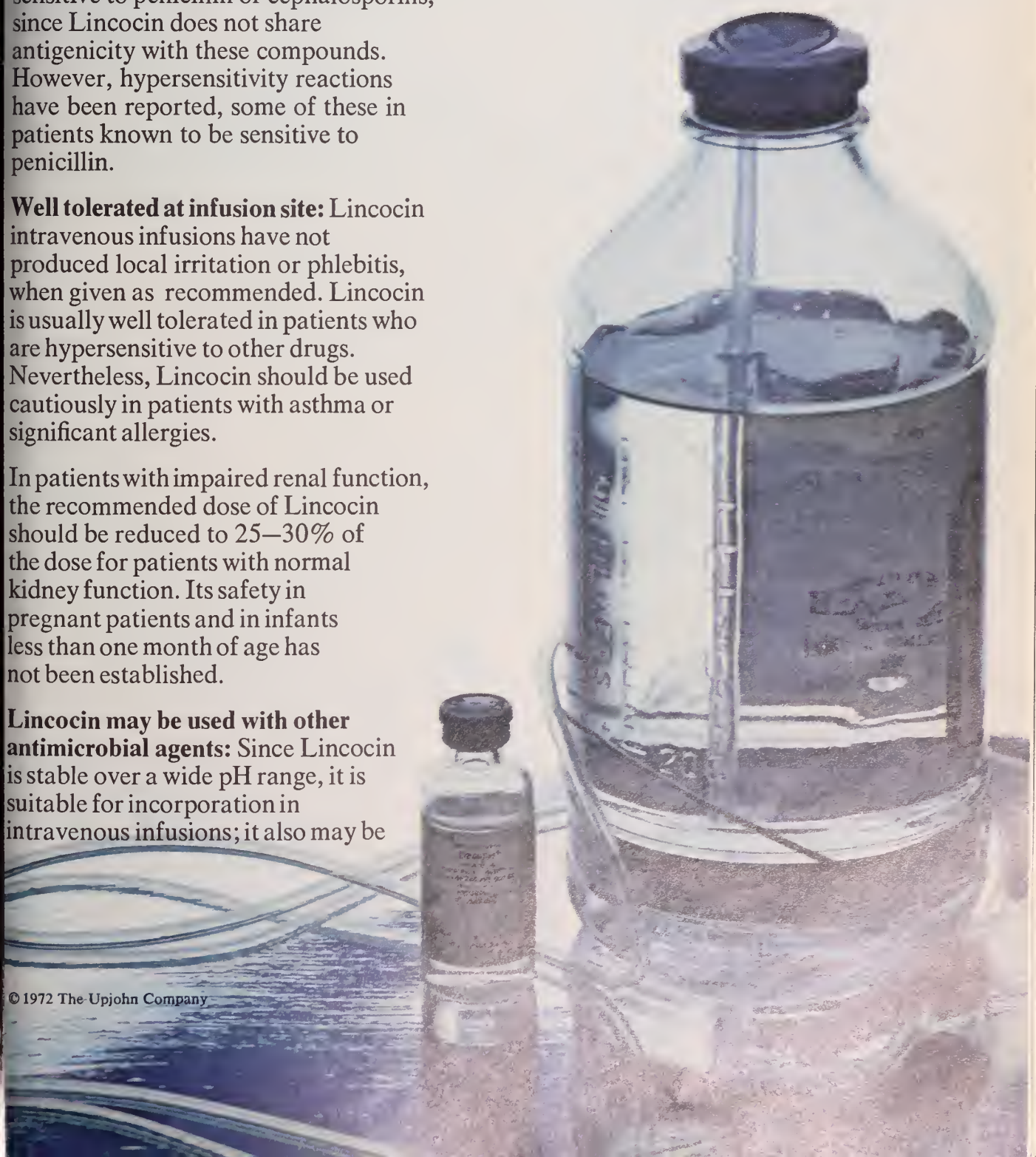
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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Kalamazoo, Michigan 49001

Upjohn

College of Surgeons Schedules Meeting

The American College of Surgeons announces its first annual four-day spring meeting, April 1-4, at the Americana and Hilton hotels in New York.

"This meeting is the initial offering in a new phase of long-range, educational planning by the college," notes Dr. C. Rollins Hanlon, director.

Eight structured postgraduate courses, some supplemented by plenary sessions and small workshop discussions comprise the program, which is planned to correlate with the Surgical Education and Self-Assessment Program (SESAP) of the college.

Registrants may choose one of the four courses offered the first two days, and a second course from those four offered the second two days.

Surgical infections, cancer of the salivary glands, acute gastrointestinal hemorrhage, hepatitis and the general surgeon, and hand injuries are among topics scheduled for Monday, April 2. Coronary artery disease, bleeding and coagulation, respiratory insufficiency, granulomatous disease of the intestine, cancer, and hemorrhage and thrombosis in 1973 will be discussed on Tuesday, April 3. Motion pictures, Ciné Clinics and some commercial exhibits will also be viewed by registrants.

"Purpose of this new annual meeting is to provide a well-rounded educational program which does not duplicate the Clinical Congress program, choosing courses based on the college's interpretation of need," states Dr. Edwin W. Gerrish, assistant director in charge of the ACS scientific programs. "Outstanding leaders in surgery, plus organizers of the SESAP program, plus planners of the Clinical Congress have collaborated in organizing this meeting, which replaces our previous schedule of three smaller sectional meetings. The substantive data from SESAP, which 12,000 surgeons, including Fellows, non-Fellows and residents have now subscribed to, enables us to plan a practical, direct answer to specific needs of the modern surgeon. New developments will be emphasized, information will be updated and some areas of wider interdisciplinary character will be introduced."

Fellows of the college whose dues are paid to date, members of the ACS candidate group, and surgical residents may register free of charge. Non-Fellows, applicants for Fellowship and Fellows whose 1972 dues have not been paid, pay $50. Non-Fellows in the Federal Services (full-time) pay $30. *Everyone* taking postgraduate courses must pay $35 per course.

Fellows of the college will receive official registration and hotel forms. Non-Fellows may write to S. Frank Arado, American College of Surgeons, 55 East Erie, Chicago 60611.

Dr. William P. Longmire, Jr., Los Angeles, is president. Dr. J. Englebert Dunphy, San Francisco, is chairman of the Board of Regents, and Dr. Bentley P. Colcock, Boston, is chairman of the Board of Governors. Dr. Harold A. Zintel, Chicago, assistant director, is in charge of the college's SESAP program.

Invitation to Scientific Exhibitors

105TH ANNUAL SESSION
APRIL 30-MAY 3, 1973
SHERATON-BILOXI

Prospective scientific exhibitors are invited to submit applications to MSMA, Box 5207, Jackson, Miss. 39216. Exhibitors are asked to give title of exhibit, authors and amount of wall space required. Exhibits will be open May 1-3 and may be erected Sunday or Monday, April 29-30.

The Aesculapius Award will be presented to the association member or members having the best scientific exhibit.

Over 1,000 Are in Family Practice Residencies

The American Academy of Family Physicians' recent annual survey of family practice residency programs shows that 1,015 young graduates are training to be family physicians.

This figure almost doubles the number enrolled in family practice residency programs a year ago. It is three times more than were in training in 1970.

The survey also indicates that 81 per cent of the available first-year family practice residency slots are filled, bettering by 10 per cent the figure in 1971. This percentage of filled first-year slots is higher than that for most other medical specialties.

Three years ago, there were 20 approved programs. There now are 107. Currently there are 34 departments and 31 divisions of family practice in the nation's 105 medical schools.

Miami Sets May Postgraduate Seminar

The University of Miami School of Medicine and the Council on Clinical Cardiology of the American Heart Association will present a postgraduate seminar entitled: "Master Interpretation of Clinical Electrophysiology" on May 29-31, 1973. The program will be held at the Contemporary Hotel at Disney World, Lake Buena Vista, Fla.

Guest faculty include Dr. Sodi Pallares, Dr. Anthony Damato and Dr. Leonard Dreifus, in addition to members of the faculty of the School of Medicine.

Tuition for the course is $150.00 for nonmembers; $125.00 for Fellows and members of the Council on Clinical Cardiology, and physicians in training. Registration is limited to 150.

Inquiries should be addressed to Dr. Louis Lemberg, University of Miami School of Medicine, P. O. Box 875, Biscayne Annex, Miami, Fla. 33152.

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DATELINE

DAC Helps Fight ug Abuse

Phoenix, Ariz. - A new service for communities in the education, prevention and treatment of drug users has been formed. Community Organization Institute is designed specifically to provide professional assistance to cities, communities, dical societies and private groups in implementing a coordinated program sed on CODAC. For further information write COI, 905 Financial Center, 43 North Central Avenue, Phoenix 85012.

EP to Study ergency Care

Hartford, Conn. - The Hartford Insurance Group and Aetna Life and Casualty have each contributed $2,500 to develop a national organization to improve emergency health care rvices. Called STEP (Study of Trauma and Emergencies Project), the organization will coordinate programs being developed by physicians, hospital emergency partments, ambulance services and other groups. Initial objectives are aining in rescue methods for the public and emergency personnel.

IC to Develop counting System

Washington, D.C. - The Social Security Administration has awarded a contract to the National Pharmacy Insurance Council to develop a uniform cost accounting system that ll provide accurate and meaningful data on an on-going basis to identify the ue costs of dispensing prescribed drugs, as well as to isolate direct and direct expenses from the product cost and to provide better overall internal ntrol.

fety Packaging t Clarified

Washington, D.C. - Food and Drug Administration has published a proposed regulation to clarify conditions under which a product subject to safety packaging standards requirements may be packed in noncomplying packages. Under 1970 poison prevention packaging act, manufacturers may market one noncomplying package of a oduct in order to make it readily available to elderly or handicapped persons able to manipulate safety closures.

dicare Hospital rtification

Chicago, Ill. - AMA again has urged that hospital certification and recertification requirements under Medicare be rescinded because they serve no useful purpose. In a tter to HEW's Health Insurance Benefits Advisory Council, now reviewing fectiveness of requirements, AMA said eliminating these requirements would a "step toward a desirable simplification of reimbursement mechanisms," and lieve physicians of the burden of unnecessary documentation.

Arizona Schedules Cardiac Symposium

The Arizona Heart Association will hold its 16th annual Cardiac Symposium Jan. 19-20 at Mountain Shadows Resort Hotel in Scottsdale, Arizona.

Sponsored in cooperation with the American Academy of Family Practice, the program will feature an outstanding panel of speakers on what's new in cardiovascular medicine.

Early registration is requested. There will be a fee of $40.00 for the two day seminar which includes two luncheons.

For registration write the Arizona Heart Association, 1720 East McDowell Road, Phoenix 85006.

Miami Plans Course on Pediatric Cardiology

The Division of Pediatric Cardiology of the University of Miami will sponsor a symposium on "Controversial Issues in Pediatric Cardiology, 1973," to be held at the Sonesta Beach Hotel in Key Biscayne, Fla., Mar. 19-22, 1973.

Sessions will be devoted to the principles of management of the infant undergoing intracardiac surgery and will include discussions of preoperative, operative and postoperative management; surgical results in specific lesions in infants, e.g. pulmonary atresia with intact ventricular septum, transposition, tetralogy and total anomalous pulmonary veins; palliative surgery—status 1973; and recent advances in electrophysiology.

The fee will be $125.00 and $50.00 for Fellows with certification by the chief of service.

For further information, write Dr. Sidney Blumenthal, Associate Dean for Continuing Education, University of Miami School of Medicine, P. O. Box 875, Biscayne Annex, Miami, Fla. 33152.

Family Practice Announces Next Exam

The American Board of Family Practice announces that it will give its next two-day written certification examination on Oct. 20-21, 1973. It will be held in various centers geographically distributed throughout the United States.

Information regarding the examination can be obtained by writing: Dr. Nicholas J. Pisacano, Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Ky. 40506.

It is necessary for each physician desiring to take the examination to file a completed application with the Board office. Deadline for receipt of applications in this office is *Aug. 1, 1973.*

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated. Usage in pregnancy.** (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The antianabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal diseases, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes, exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, "Rondomycin" (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of "Rondomycin" (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas, and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**) total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: "Rondomycin" (methacycline HCl) 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 12/71

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When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

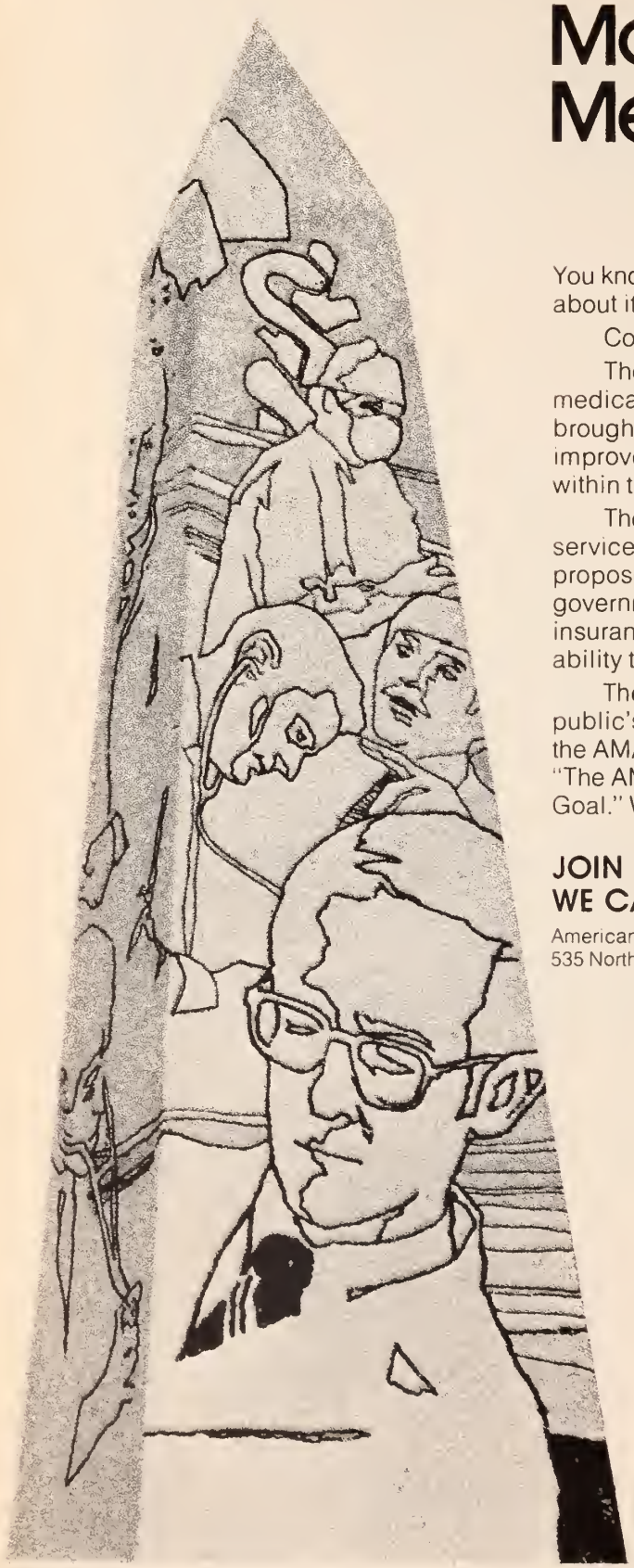
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Delivers from the very first dose:

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*Since many strains are known to be resistant, routine sensitivity testing is recommended.



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The AMA is working hard to protect your interests and the public's. But we need your support. Find out more about what the AMA is doing for you and the public. Send for the pamphlet "The AMA and the American Doctor: Sharing a Common Goal." Write: Dept. DW, at the address below.

JOIN US.
WE CAN DO MUCH MORE TOGETHER.

American Medical Association
535 North Dearborn Street/Chicago, Illinois 60610

AMA Recruits Physicians For Needy Areas

The American Medical Association is launching a program of recruiting physicians to serve in rural and inner city areas that are now short of doctors, Bernard P. Harrison, AMA staff executive and project director for the program, has announced.

The AMA is operating through a contract with the federal government's National Health Service Corps to assist in getting more trained people into areas where health services are in short supply, Mr. Harrison said.

Immediate need is for physicians to serve for short periods beginning April 1, 1973, in rural and inner city areas already staffed by longer-term volunteers.

"The present crew of more than 150 physician volunteers began their tour of duty last April. They will need short term replacements during short leaves for postgraduate training, continuing education, and vacations, beginning next spring," the project director said.

"Our initial assignment is to obtain these substitute doctors."

In the future the AMA also will assist in recruiting men and women physicians for the longer-term assignments of one to two years.

The House of Delegates endorsed the AMA's participation in the program at its annual convention last June in San Francisco.

"The National Health Service Corps (NHSC) is a realistic approach to improved health care delivery in physician-shortage areas," Mr. Harrison said.

"Already, with only a few months of active operation and with only a relatively few physicians involved thus far, the NHSC has proved that it can provide the integral structure for progress to continue."

The corps is the product of the Emergency Personnel Act adopted by Congress in 1970. The act authorizes the assignment of commissioned U. S. Public Health Service officers and civil service personnel to areas where health services are inadequate because of shortages of health professionals. The program is conducted through the cooperation of state and local medical societies, who certify the need for the personnel.

Requests for NHSC personnel originate within the community concerned. They are followed up with the combined efforts of state and local government, professional associations and the people themselves.

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Shortage areas are determined by four major considerations—

(1) Current health resources; the number and types of health personnel and facilities now available.

(2) Accessibility and availability of health care.

(3) Special health status indicators, such as high infant mortality and disease rates.

(4) Demand for services on the part of citizens, especially the realization that they need medical care and are prepared to utilize it.

Some 104 communities already have corps personnel at work, and 40 additional communities have been approved for the service. Thus far 80 per cent are in rural areas.

In addition to physicians, dentists, nurses and other health personnel are involved in the program.

Additional information about the program and how to apply for a service appointment is available from: Project USA, Division of Medical Practice, American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610.

Hospital Administrators Plan Congress

The American College of Hospital Administrators will hold its 16th Congress on Administration at The Palmer House in Chicago, Feb. 22-24.

For further information, write Richard J. Stull, Executive Vice President, American College of Hospital Administrators, 840 N. Lake Shore Drive, Chicago, Ill. 60611.

NIMH Funds Pilot Home Education Project

An experimental home education program for children in a disadvantaged Chicago neighborhood will be staffed by a specially trained team of community women, in a project recently funded by the National Institute of Mental Health of HEW's Health Services and Mental Health Administration.

Sister Margaret I. Healy, Ph.D., director of teacher education at the city's Mundelein College, has received a $55,000 grant for the second year of the pilot program. The research project will be conducted in Chicago's Lawndale area, and is designed to reach 15 or more families unable to bring their children to a neighborhood child development center.

A team of three community women will be employed and trained. They will make weekly visits to the participating families, bringing learning materials to the child's home, and demonstrating how they should be used. Each week new learning materials will be supplied and left in the home for the parents and child to work with.

A project psychologist will give in-service training to the project team, and also offer family therapy to the Lawndale families if it is needed.

The children will be given yearly intelligence testing (Stanford-Binet), and there will be a follow-up program to determine whether gains made at ages two to three years hold through later schooling and into adulthood.

The residents of the eight-block area are predominantly Black, and are recent migrants from the South. The adult educational level is below the eighth grade, with an apparent average reading ability of the fourth grade. The average annual family income is low.

By focusing on community strengths, such as the ability of Lawndale residents to cooperate on a goal important to them—the education of their children—and on the involvement of the total home rather than the children alone, Dr. Healy seeks to establish a model that will work in many different types of communities.

Gantrisin® (sulfisoxazole) Roche® provides your patients with many important advantages:

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Nonobstructed urinary tract infections (mainly cystitis, pyelitis, pyelonephritis) due to susceptible organisms. **Important Note:** ***In vitro*** **sensitivity tests not always reliable; must be coordinated with bacteriological and clinical response. Add aminobenzoic acid to follow-up culture media. Increasing frequency of resistant organisms limits usefulness of antibacterial agents, especially in chronic and recurrent urinary infections.** Maximum safe total sulfonamide blood level, 20 mg/100 ml; measure levels as variations may occur.

Contraindications: Hypersensitivity to sulfonamides; infants less than 2 months of age; pregnancy at term and during the nursing period.

Warnings: Safety in pregnancy not established. Do not use for group A beta-hemolytic streptococcal infections, as sequelae (rheumatic fever, glomerulonephritis) are not prevented. Deaths reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias. Sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. CBC and urinalysis with careful microscopic examination should be performed frequently.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy or bronchial asthma. Hemolysis, frequently dose-related, may occur in glucose-6-phosphate dehydrogenase-deficient patients. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; *Miscellaneous reactions:* Drug fever, chills and toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Supplied: Tablets containing 0.5 Gm sulfisoxazole.

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Average daily cost of therapy only about 78¢
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Usual adult dosage:
4 to 8 tablets *stat*
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No 717-B Extra bottom section 14.50

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Child Abuse Center Established

The Robert Wood Johnson Foundation has announced a grant of $588,000 for the establishment of a new National Center for the Prevention and Treatment of Child Abuse and Neglect.

The center, being launched by the University of Colorado Medical Center, Denver, is aimed at developing a nationwide attack on parental abuse and neglect of children—a major health and social problem in the United States, involving an estimated 60,000 children annually.

The center will build on the work of the University's child protection team, organized by Dr. C. Henry Kempe, chairman of the department of pediatrics, to test and demonstrate a coordinated approach to parental child abuse. The team includes pediatricians, psychiatrists, public health nurses, and social workers.

By concentrating on rehabilitating the involved parents, the team has enabled 80 per cent of the children in the more than 500 cases it has treated to be returned to their families without a recurrence of abuse.

In announcing the grant, Dr. David E. Rogers, president of the foundation, said:

"Dr. Kempe and his colleagues at the University of Colorado Medical Center have not only called attention to parental abuse and neglect of children as a serious problem in American life, they have also demonstrated that it is a preventable and treatable behavioral illness among parents.

"The National Center for the Prevention and Treatment of Child Abuse and Neglect is designed to help generate a national attack on the problem by making the forms of care developed at Colorado more widely known and practiced. The Robert Wood Johnson Foundation is pleased to contribute to this effort to strengthen child care services and family life in our society."

The foundation was established in 1936 by the late General Robert Wood Johnson, who died in 1968, leaving the foundation the bulk of his estate. This bequest was received by the foundation in 1971, bringing its year-end assets to approximately $1.2 billion and marking a new phase in its history.

For more than 10 years the University of Colorado Medical Center has played a major role in the investigation and treatment of the phenomenon of child abuse and neglect.

Its work has helped to demonstrate that severe maltreatment in early infancy almost inevitably leads to major physical or psychological damage, including mental retardation.

The research has also indicated that the causes of abusive parental behavior are rooted in the childhood of the parents themselves. Abusive parents, typically, are found to have been raised in an atmosphere of rigid discipline and unrealistic expectations placed upon them by their own parents. They place the same kind of burden on their own children and, when the children fail to respond as desired, they punish them through physical attack or purposeful deprivation.

Demonstrating how this cycle can be broken will be the goal of the new national center through its educational, consulting, and research functions.

It will emphasize the importance of the team approach in developing a comprehensive attack on the problem. At Colorado, the team is alerted to every suspected case of child abuse appearing at the University hospital. Once a case of abuse has been identified, the various specialties of the team are marshalled to provide prompt medical treatment for the child victim.

The center's research will draw on the large body of clinical case data compiled at Colorado over the past decade, and a library of materials that includes more than 800 publications, films, and videotapes.

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"The history of science, and in particular the history of medicine... is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

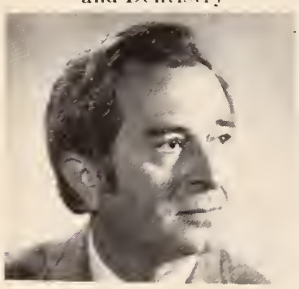
13.8%
Do not believe combination drug products are useful.

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility — and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a great deal of money. I wish we could agree on a "grandfather clause" approach to preparations that have been in use for a number of years and that have an apparently satisfactory track record.

For example, I think some of the antibiotic combinations that were taken off the market by the FDA performed quite well. I am thinking particularly of penicillin - streptomycin combinations that patients—especially surgical patients—were given in one injection. This made for less discomfort for the patient, less demand on nurses' time, and fewer opportunities for dosage errors. To take such a preparation off the market doesn't seem to be good medicine, unless actual usage showed a great deal of harm from the injection (rather than the proper use) of the combination.

The point that should be emphasized is that there are both rational and irrational combinations. The real question is, who should determine which is which? Obviously, the FDA must play a major role in making this determination. In fact, I don't think it can avoid taking the ultimate responsibility, but it should enlist the help of outside physicians and experts in assessing the evidence and in making the ultimate decision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories



If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" decries the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the *usual* dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?
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ORIGINAL PAPERS

Laparoscopy

GEORGE R. HUGGINS, M.D., and
THANO EXARCHOS, M.D.
Jackson, Mississippi

The first 100 patients undergoing diagnostic and therapeutic laparoscopies at the University of Mississippi Medical Center are studied and the results of this study are reported. An analysis of the results shows that laparoscopy has been especially useful in avoiding unnecessary laparotomies. Tubal fulgurations are safe and feasible. Laparoscopy, in many cases, has led to decreased hospitalization time and cost to the patient.

LAPAROSCOPY HAS BECOME an increasingly popular method in the United States for intraperitoneal pelvic exploration and partial salpingectomy. Several large series of patients have been reported during this past year that have attested to:

(1) The safety of the procedure both in the diagnostic and therapeutic areas.

(2) The efficacy of the procedure in sterilization.

(3) The economic savings to the patient when compared with cost for exploratory laparotomy because of decreased convalescent time.

(4) The superiority of laparoscopy as compared to culdoscopy.[1, 2, 3]

Our experience with the first 100 patients is reviewed and a general discussion of laparoscopy is presented.

The general indications for laparoscopy are:

(1) undiagnosed pelvic pain
(2) suspected unruptured ectopic pregnancy
(3) suspected pelvic mass
(4) infertility investigations
(5) sterilization procedures.

As a diagnostic tool, it is most useful in avoiding unnecessary exploratory laparotomy for pelvic pain or suspected ectopic pregnancies. Some series have shown that laparoscopy has avoided further surgical exploration in over 50 per cent of patients suspected of ectopic pregnancy.[3, 4]

All patients undergoing laparoscopy at the University of Mississippi Medical Center are administered a general anesthetic and are intubated. This permits accurate, continuous, and good oxygenation of each patient. There are reports of the use of local anesthesia with good results;[5] however, most practitioners prefer the use of general anesthesia because of increased patient safety.

Contraindications include:

(1) Serious medical problems such as cardiac or pulmonary disease which in themselves would contradict general anesthesia.

(2) Acute peritonitis.

(3) Multiple previous laparotomies with the possibility of pelvic adhesions.

(4) A large hiatal hernia.

(5) Extreme obesity.

(6) Ascites or bowel obstruction in the face of recurrent intraperitoneal carcinoma.

Presented before the Section on Surgery, 104th Annual Session, May 9, 1972, at Biloxi.

From the Department of Obstetrics and Gynecology, University of Mississippi Medical Center, Jackson, Miss.

The techniques of pneumoperitoneum and laparoscopy are adapted from Steptoe[6] and are as follows:

(1) General anesthesia is administered and the patient is intubated.

(2) The patient is then examined under anesthesia and a tenaculum applied to the anterior lip of the cervix.

(3) The patient is then prepped, draped and placed in steep Trendelenburg position.

(4) Pneumoperitoneum is accomplished using the Verres needle inserted just inferior to the umbilicus in the midline.

(5) Installation of carbon dioxide is accomplished using the Wisap-CO_2-pneu-automatic CO_2 insufflator. (Wolf Instrument Company, 7046 Lyndon Avenue, Rosemont, Illinois.)

(6) The skin is grasped on either side of the umbilicus with skin clips and the anterior abdominal wall lifted up. A 1 cm transverse incision is made just inferior to the umbilicus and a 10 mm trocar thrust into the peritoneal cavity.

(7) Visualization of the pelvic contents is then accomplished with a 10 mm 180° fiber optic telescope.

(8) If manipulation of the pelvic structure is required, a second small incision is made in the right lower quadrant; after transilluminating this area to avoid the inferior epigastric vessels, a 5 mm trocar is thrust into the peritoneal cavity. Instruments such as probes, pick ups, and coagulating apparati may be inserted through this second trocar sleeve.

(9) For sterilization, the tubes are grasped about 2 cm from the cornu with an Eder biopsy tong and the tubes coagulated for approximately 1 cm to each side of the tong.

(10) Next, a segment of the coagulated portion of the tube is excised.

(11) Both sides are rechecked for hemostasis prior to draining off the excess carbon dioxide and removal of the trocars. The skin incisions are closed with subcuticular chromic sutures.

COMPLICATIONS

Fortunately, the reported serious complications are infrequent and most often can be avoided by meticulous attention to good anesthetic and operative techniques.

TABLE I

MAJOR COMPLICATIONS

1. Pneumomediastinum
2. Pneumothorax
3. Air emboli
4. Perforation of an enlarged liver
5. Abdominal wall hematomas
6. Omental hematomas
7. Cardiac arrest
8. Bleeding after biopsy or fulguration which required exploratory laparotomy

A recent comprehensive review by Horwitz[3] analyzed over 35,000 cases with a mortality rate of 0.2 per cent. Further analysis of this series revealed that the majority of mortalities resulted from poor patient selection or inexperience of the operator. Major complications reported are listed in Table I.

Again, an analysis of most of the serious complications reveals their occurrence in patients who had complicating medical problems such as severe ascites, liver cirrhosis, or severe cardiac disease.[3]

An analysis of the first 100 patients undergoing laparoscopy at the University of Mississippi

TABLE II

DIAGNOSTIC LAPAROSCOPIES BY PRE- AND POSTOPERATIVE DIAGNOSIS

	Preoperative Diagnosis					
Postoperative Diagnosis	PELVIC PAIN	CHRONIC PID	AMENORRHEA INFERTILITY	ECTOPIC PREGNANCY	ADNEXAL MASS	*Totals*
Normal	8	1	5	1	1	16
PID, acute and chronic	5	6	1	1		13
Fibroids	1	1			2	4
Pelvic congestion syndrome	2					2
Ruptured corpus luteum	1					1
Endometriosis	3					3
Ovarian agenesis			1			1
Polycystic ovaries			1			1
Totals	20	8	8	2	3	41

Medical Center shows 41 patients operated on for diagnostic purposes and 60 patients for tubal fulguration and two patients operated on for removal of perforated intrauterine devices. Table II shows a comparison of the preoperative and postoperative diagnoses. All these patients had been examined by a resident and an attending staff physician prior to operation.

Sixteen of 41, or 39 per cent, had normal pelvic findings. The 16 patients with normal findings, the two patients with leiomyomata, the two patients with pelvic congestion syndrome, and the one patient with a ruptured corpus luteum cyst were all spared an exploratory laparotomy and were all discharged within 24 hours.

Of interest were the two patients who had intrauterine devices that had perforated the uterus and were lying free in the pelvic cavity. These devices were removed by the laparoscope and the patients discharged within 24 hours.

TABLE III

AGE DISTRIBUTION TABLE OF PATIENTS HAVING LAPAROSCOPIES

Age Group	*Number of Patients*	*Per Cent of Total Patients*
15-19	4	4.0
20-24	23	23.0
25-29	37	37.0
30-34	18	18.0
35-39	11	11.0
40-44	3	3.0
45 and over	4	4.0
Total	100	100.0

Table III shows the age distribution of the study patients. The average age of the 100 patients in the study was 26 years with a range from 15 years to 46 years of age.

Table IV lists the number of living children for each patient undergoing sterilization. Of the two patients who had no living children, one patient had severe chronic glomerulonephritis. The other patient had been married six years. Both she and her husband were adamant about having no children.

Table V shows the length of anesthesia time for patients undergoing laparoscopy alone and does not include those patients who required subsequent laparotomy. The shortest anesthesia time was 35 minutes, the longest time was 2 hours and 5 minutes. The average time was 71 minutes.

Table VI shows the length of operating time for patients undergoing laparoscopy with tubal fulguration. The shortest operating time was 20 minutes, the longest operating time was 1 hour and 45 minutes. The average operating time was 48 minutes.

TABLE IV

PARITY TABLE FOR PATIENTS WITH TUBAL FULGURATIONS

Number of Living Children	*Number of Patients*
0	2
1	1
2	17
3	13
4	11
5	7
More than 5	9
	60

Table VII lists the operative complications. Either obesity in the patient or inexperience of the operator was the probable cause. In one patient, it was impossible to visualize the tubes because of peritubular adhesions. This patient subsequently underwent a hysterectomy. In one patient, bleeding occurred close to the uterine wall following coagulation. This could not be stopped with laparoscopy coagulation and the patient required exploratory laparotomy for hemostasis. One patient developed a hematoma of the abdominal wall. Etiology of this is probably perforation of a small branch from the inferior epigastric artery. Six patients experienced low grade postoperative fevers of less than 101°. In none of these cases were the patients treated with antibiotics and all of the fevers resolved spontaneously in 48 hours.

TABLE V

DISTRIBUTION OF ANESTHETIC TIME

Time in Minutes	*Number of Patients*
0-40	2
41-50	4
51-60	19
61-70	12
71-80	11
81-90	6
Over 90	6
Total	60

DISCUSSION

Preliminary experience with diagnostic and sterilization laparoscopy in our hands has been satisfactory. The length of operating and anes-

thesia time are longer than in most reported series. This is because each of these study patients was used as a teaching opportunity for medical students, house officers, and other members of the attending staff. In addition, all of the patients were examined under anesthesia prior to the operative procedure and 28 of the patients had a diagnostic dilatation and curettage performed prior to laparoscopy. Subsequent to these first 100 study patients, we have found the average operating time to be approximately 30 minutes when no teaching activities are involved.

TABLE VI
DISTRIBUTION OF OPERATING TIME

Time in Minutes	*Number of Patients*
0-20	4
21-30	6
31-40	15
41-50	21
51-60	6
61-70	1
71-80	3
81-90	1
Over 90	3
Total	60

The complications have been minimal in nature despite the inexperience of most of the operators. We have seen a rather marked reduction in operating time and a decrease in the number of complications as the experience of each operator increases. Our present hospital protocol requires hospitalization prior to the evening of surgery so that the average hospital stay is 48 hours for patients undergoing fulguration. This can easily be shortened to 24 hours with adequate administrative procedures for direct admission on the day of surgery.

TABLE VII
POSTOPERATIVE COMPLICATIONS

Type of Complication	*Frequency of Occurrence*	*Percentage of Total Number of Operations (Per Cent)*
Failed laparoscopy	4	4.0
Failed tubal fulgurations	1	1.0
Bleeding requiring laparotomy	1	1.0
Hematoma at abdominal incision	1	1.0
Fever	6	6.0
No complications	87	87.0
Totals	100	100.0

In general, we feel that laparoscopy, when used judiciously, is a safe, useful addition to the surgical armamentarium of the gynecologist. ★★★

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Venomous Bites and Stings in Mississippi

HUGH L. KEEGAN, Ph.D.
Jackson, Mississippi

In Mississippi, as in many of the southern states, envenomation by snakes and a variety of arthropods is a definite public health hazard during the warmer months. The number of persons treated for venomous bites and stings in the United States yearly has never been accurately determined. Parrish (1966) estimated that 6,680 persons were treated for snakebite in the United States during 1959.[1] During the same year, only 14 persons died from snakebite in this country. In 1961 Russell thought it probable that at least 100,000 persons are stung or bitten by insects and other venomous arthropods in the United States every year.[2]

Although records of the Mississippi State Board of Health show that only seven persons in the state died from venomous bites and stings during the period 1966-1970, the data given above seem to indicate that the painful effects of such accidents might be experienced by thousands of Mississippians yearly.

In an effort to determine the magnitude of this problem in our state, questionnaires were sent to 246 of the 1,736 physicians listed as being in active practice in 1971. A deliberate effort was made to send these to physicians located in rural areas, where accidents caused by venomous animals might be expected to occur more frequently than in heavily industrialized regions. No attempt was made to determine the specialties of the addressees, thus it was inevitable that many questionnaires were received by doctors who never saw patients of the types mentioned. This questionnaire simply asked the physician to indicate how many patients in each of the following categories he had treated during 1971: snakebite, spider bite, wasp, bee or ant sting, and miscellaneous bites or stings. A total of 135 physicians who completed and returned the questionnaire had seen 122 snakebite cases, 499 spider bites, 2,381 persons treated for wasp, bee or ant sting, and 387 patients who had been bitten or stung by miscellaneous, usually unidentified, animals. The number of cases of wasp, bee or ant sting noted above does not include an approximate 60 patients seen in an allergy clinic in Jackson, and "innumerable" cases reported by a physician located in east-central Mississippi.

Data obtained in a recent survey indicate that envenomation from snakebite and from stings and bites by arthropods is a public health problem of some magnitude in Mississippi. A total of 135 physicians who replied to a questionnaire requesting information on treatment given for this cause during 1971 had seen 122 snakebite cases, 499 spider bites, 2,381 persons treated for wasp, bee or ant sting, and 387 patients who had been bitten or stung by miscellaneous, usually unidentified, animals.

Nine physicians had seen more than 50 wasp, bee or ant sting patients during the year, and five reported having treated more than 100 patients in this category. Since the number of physicians who completed and returned the questionnaire represented only about 15 per cent of the doctors who might be expected to be in a position to see such cases, a rough estimate of the total numbers of cases in each category seen by Mississippi physicians during 1971 would be: snakebite—824; spider bite—3,333; wasp, bee or ant sting—15,900; and miscellaneous bites and stings—2,580.

Relatively few of the physicians who completed the questionnaire specifically identified the animals responsible for the accidents listed. In answering the questions concerning wasp, bee or ant

From the Department of Preventive Medicine, University of Mississippi Medical Center, Jackson, Miss.

sting, seven physicians listed wasps as responsible in 80 cases, and fire ants as the culprits in 57 cases. Bees were listed alone in only one case.

Five physicians listed the brown recluse spider as responsible for a total of 31 bites, and black widows as causes of four cases of spider bite. In the miscellaneous category, the offending organisms were unknown in most instances. However, mosquitoes, ticks, gnats, deer flies, horseflies, blister beetles, and triatomid bugs were listed as probable causes. In the snakebite category three doctors listed snake species involved. Moccasins were definitely responsible for three cases, copperheads for two, and a rattlesnake for one case.

Following is a brief review of some pertinent information concerning each of the four categories of venomous bites and stings listed in the questionnaire.

SPECIES OF SNAKES

Nine species of venomous snakes are known to occur in Mississippi.[3] These are: *Agkistrodon contortrix contortrix* (southern copperhead), *Agkistrodon piscivorous piscivorous* (western cottonmouth moccasin), *Sistrurus miliarus barbouri* (dusky pigmy rattlesnake), *Sistrurus miliarus miliarus* (Carolina pigmy rattlesnake), *Sistrurus miliarus streckeri* (western pigmy rattlesnake), *Crotalus horridus atricaudatus* (canebrake rattlesnake), and *Micrurus fulvius fulvius* (eastern coral snake). Of these the southern copperhead, the western moccasin, the western pigmy rattlesnake, and the canebrake rattlesnake are found over the entire state. The western diamondback rattlesnake is found from Hinds County south and east, and the eastern coral snake is found in the southern three-fourths of the state. The dusky pigmy rattlesnake has been reported only from southeastern Mississippi. Additional collecting data will be necessary to determine whether the remaining two species have actually become established in the state.

Without question the most important "breakthrough" in treatment of snakebite in recent years in the United States was the announcement in 1968 that Wyeth Laboratories had developed an antivenin effective against venom of the eastern coral snake, *Micrurus fulvius*.[4] This antivenin, made by hyperimmunizing horses to the venom of the coral snake, was produced as a public service by Wyeth Laboratories, and distributed gratis to selected hospitals and health care centers in the nine states where the coral snake occurs. These are: Florida, Georgia, Alabama, Louisiana, Mississippi, South Carolina, North Carolina and Texas.

The product, Antivenin *(Micrurus fulvius),* is supplied in a combination package containing five vials of lyophilized antivenin with phenol (0.25 per cent) and thimerosal (0.005 per cent) as preservatives (before lyophilization), five vials of diluent, each containing 10 ml of bacteriostatic water for injection, U.S.P. with phenylmercuric nitrate (1:100,000) as preservative. The antivenin should be stored between 35-46 degrees F and should never be frozen.

In Mississippi coral snake antivenin is available from the Preventable Disease Control Division of the State Board of Health, and also at the University Hospital in Jackson. Additional supplies may be obtained from the Center for Disease Control, 1600 N. E. Clifton Road, Atlanta, Georgia, telephone (404) 633-3311.

In a recent paper McCollough and Gennaro suggested that the physician be prepared to administer no less than five or six vials of antivenin as rapidly as possible.[5] Since the University Hospital has only one combination package in stock and the State Board of Health has only three such packages, the supply situation for this item could become critical. Fortunately coral snakebite is somewhat of a rarity in our state and even in Florida, where the species is more commonly encountered. McCollough and Gennaro reported that the Florida State Board of Health had recorded only 49 coral snakebites in that state between 1963-1969, and that no deaths from this cause had occurred since 1959.

TABLE I

VENOMOUS BITES AND STINGS IN MISSISSIPPI

(Patients Treated for These Causes by 135 Mississippi Physicians during 1971)*

Type of Accident	*Patients Treated*
Snakebite	122
Spider bite	499
Wasp, bee, or ant sting	2,381
Miscellaneous	387
Total	3,389

* Those who completed a questionnaire on the subject sent out to 246 physicians during April, 1972.

In the same paper these workers pointed out that coral snake envenomation presents an entirely different picture from that seen in bites by moccasins and other pit vipers. Coral snakebites are often accompanied by little or no pain, no swelling and by a delay in systemic reactions, which may not occur until several hours follow-

ing the bite. Early symptoms are euphoria, weakness, dizziness, hypersalivation, confusion, and hematuria. Strabismus, double vision, ptosis, dysphagia, dysphonia and facial palsy are ominous signs. They advise that tracheostomy and artificial respiratory aid with oxygen should be at the bedside for 24 hours at a minimum.

Although antivenin therapy has long been accepted as the most effective single measure in management of snakebite, the route of administration was a matter of question until recently. In 1966 McCollough and Gennaro noted that intramuscular and local injection of venom had no effect in relieving symptoms of the patient, whereas dramatic improvement was seen following intravenous injection of a large amount of antivenin (they have used up to 20 ampules in a two hour period).[6] Parrish and Hayes also expressed the opinion that intravenous administration of antivenin was the only logical route.[7]

The question as to whether incision and suction should be advocated as first aid measures or in definitive treatment of snakebite has long been a matter of controversy. Recently, however, several authorities have proven that incision and suction properly executed will definitely remove significant amounts of the venom from fang punctures. The consensus is that the incision should be short, ⅛ to ¼ inch in length, either cruciform or longitudinal through the fang puncture, and should just go through the skin. If suction is instituted soon, less than 30 minutes following the bite, the patient may benefit. If the patient is not seen until later, incision and suction will be of little value.[8, 9]

While it is of scant comfort to the patient who has received a severe snakebite, Parrish found in his survey that of 2,433 patients hospitalized for snakebite, 27 per cent had no venom poisoning, and that an additional 37 per cent had minimal envenomation with only local symptoms. Only 14 per cent of the patients had suffered severe envenomation.

SPIDERS

Although only five physicians listed the brown spider, *Loxosceles reclusa,* as responsible for bites seen by them, random conversations with doctors here at the medical center and elsewhere indicate that this species causes far more accidents yearly in Mississippi than does the black widow spider. This is not unexpected as Gorham, in a recent paper, published a map showing that *L. reclusa* was more widely distributed in Mississippi than in any other state.[10]

While many doctors are familiar with the slow healing, ulcerating lesions produced by brown spider bite, Russell and his colleagues pointed out that a variety of spiders may produce lesions similar to those caused by *Loxosceles* bite, and that bites by other arthropods also may be mistaken for brown spider bite.[11] In any event the treatment of bites by *L. reclusa* and by other spiders which produce similar results must remain empirical until more is known concerning properties of spider venoms. Although a *Loxosceles* antivenin is produced at the Instituto Butantan in São Paulo, Brazil, this product is not licensed for sale in the United States and is available at only a few research institutions. Russell and his coworkers recommend that in *Loxosceles* bites and those by unidentified spiders where a skin lesion develops within the first 12 hours and increases in size during the next 12 hours, the patient should be given hydrocortisone succinate (Solu-Cortef). They recommend that an initial dose of 200 mg be given intravenously over a three minute period, that subsequent doses of 200 mg by given intramuscularly every six hours for the next 24 hours and that the patient should remain on this parenteral schedule or a similar oral schedule for three to six days. These authorities were of the opinion that if the patient is not seen until 48 or more hours after the bite, and a well-developed cutaneous lesion is present at the wound site, steroids may be of little value. They also recommend a practice already followed by many physicians in Mississippi: excision of the lesion when a well-developed lesion is present and when the patient is seen within eight hours following the bite. Daily cleansing of the lesion, debridement, and application of appropriate bacteriostatic agents has produced good results in promotion of healing.

Administration of Antivenin *(Latroductus mactans),* MSD (Black Widow Spider Antivenin), remains the treatment of choice for black widow spider bites. Although the producer's brochure warns against intravenous administration of this material, authorities in the field have recently employed intravenous administration of antivenin with no ill effects and recommend this route.[11] Intravenous administration of 10 ml of 10 per cent calcium gluconate has long been a remedy for the muscle pains and spasms caused by *Latroductus* envenomation. Russell and his coworkers have found that even more effective relief is afforded by using methocarbamol (Robaxin) 10 ml intravenously over a five minute period and by following this with another 5 or 10 ml in a drip of 250 ml of 5 per cent dextrose in water. If the symptoms are relieved, oral methocarbamol,

500 mg every six hours for 24 hours can then be given.

The large number (2,381) of persons treated for wasp, bee, yellow jacket, or ant stings by the 135 physicians who completed the questionnaire was not surprising. In an analysis of 460 fatalities from venomous animals in the United States, Parrish found that 50 per cent had been caused by wasps and related hymenopterans.[12]

Conditions under which such stings may lead to serious illness or death were described by Vachon as falling into four categories. These are: (a) Massive envenomation by multiple stings (deaths have been reported after as few as 30-60 stings, but it is considered that 400 or 500 stings more frequently result in death for an adult); (b) Particular localization of the sting. (Stings on the head may affect the central nervous system, and stings on the throat may result in dangerous edema); (c) Direct intravascular injection of venom. (This must certainly be a very rare occurrence); (d) An abnormal sensitivity. (This is by far the most important cause of death from hymenopteran stings. In sensitized persons the onset of symptoms is rapid, usually reaching a maximum within 30 minutes or less following the stings. Abnormally great swelling, massive urticaria, and shock are characteristic and may be accompanied by severe dyspnea, wheezing and coughing, "hot flushing," general trembling and coma.)

FIRE ANT STING

An excellent account of symptoms displayed by two patients allergic to venom of the fire ant appeared recently.[14] The first of these patients, who had no previous history of bites and stings, developed systemic reactions soon after receiving three stings on the foot. Symptoms included facial edema, particularly around the eyes, redness of the face, neck, chest, upper arms and conjunctivae urticaria, increased heart rate, bounding pulse, elevated blood pressure, faintness, blurred vision, and chest pains. Benedryl (50 mg orally) and Dexamethasone (5 mg given intravenously) were effective in reducing these symptoms.

The second patient described was a nine-year-old boy who had a history of fire ant stings over a period of years. Symptoms were similar to those of the first patient except that the tongue and mucous membranes became edematous. In this instance isoproterenol hydrochloride (Isuprel) was used twice sublingually, and Benedryl (25 mg) was taken orally. These were effective in reducing severity of the symptoms.

It came as a surprise to the writer that none of the physicians who completed the questionnaire mentioned urticating caterpillars under the miscellaneous bites and stings category. As several urticating species occur in Mississippi, it is possible that some of the reactions produced by stings of unidentified arthropods could have been caused by them.

Dermatitis, pain and even severe systemic manifestations may follow contact with caterpillars of some moth species. These effects are produced by venom contained in sharp hairs or spines borne singly or in clusters on the body of the caterpillar. Sometimes these hairs are found on the walls of cocoons and on the wings and bodies of adult moths, being carried over mechanically from the cocoon by the emerging adult.

The largest "outbreak" of caterpillar dermatitis in the United States occurred in south Texas in 1958 and was described in detail by McGovern et al.[15] Symptoms produced by contact with urticarial species may be restricted to reddening of the skin, itching, and mild dermatitis, but in some cases may include sudden burning pain, swelling, lymphangitis, numbness, papule-like eruptions, blistering, urticaria, nausea and vomiting, headache, paralysis, and shock.[16]

Treatment of caterpillar "sting" described by most authorities has been symptomatic. Success in pain relief has been afforded in some cases by use of codeine, morphine sulphate, and meperidine. It has been reported that intravenous administration of 10 ml of a 10 per cent solution of calcium gluconate gave quick relief from intense pain caused by the "Texas Asp," puss caterpillar (also found in Mississippi). In cases where urticaria has been severe, 10 minims of 1:1000 adrenalin injected twice daily for two days has brought relief. Sodium thiosulphate has been used for desensitization. Ice packs have been reported as helpful in relief of pain, but antihistaminics have not been of noticeable value. Two detailed literature reviews on the subject have been published recently.[16-17]

SUMMARY

Data obtained in a recent survey indicate that envenomation from snakebite and from stings and bites by arthropods is a public health problem of some magnitude in Mississippi. A total of 135 physicians who replied to a questionnaire requesting information on treatment given for this cause during 1971 had seen 122 snakebite cases, 499 spider bites, 2,381 persons treated for wasp, bee, or ant sting, 387 patients who had been bitten or stung by miscellaneous, usually unidentified, animals.

The major "breakthrough" in snakebite treatment is the current availability of a coral snake antivenin produced by Wyeth Laboratories. The brown recluse spider has apparently replaced the black widow spider in importance in Mississippi. Treatment remains empirical, as no antivenin is available in the United States, and much remains to be learned concerning the properties of the venom of this spider. ★★★

2500 North State Street (39216)

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MODERN TECHNOLOGY

An ominous rumble from the rear of the car in which a new member of a car pool was riding to work one morning made the man wonder if they'd make it. Just as he was about to mention it, the driver pulled into a filling station. Instead of telling the attendant about the noise, he nonchalantly ordered him "to fill it up." As they drove away, the passenger noticed that the rumble had disappeared completely. Mystified, he asked the driver how a full tank of gas could eliminate the noise.

"Oh, there's nothing wrong with my car," replied the owner. "My four-year-old stuffed a golf ball into the gas tank, and when the ball starts to rattle around I know it's time to fill the tank again."

Radiologic Seminar CXXII: Orbital Blow-out Fractures

EDWARD L. GIEGER, M.D.
Jackson, Mississippi

FRACTURES INVOLVING the orbit occur frequently in association with other fractures of the facial bones. Several types of fracture involve the orbit alone, one of which is the orbital "blow-out" fracture.

The "blow-out" fracture is usually the result of a direct blow to the orbit from the front by a blunt object. This results in a sudden increase in the hydrostatic pressure within the orbit. The orbital contents are non-compressible and this sudden increase in pressure is transmitted to the thinnest portions of the bony orbit, the medial and inferior walls. In addition to being the thinnest portions of the bony orbit, these areas also lack support externally by soft tissues, being adjacent to the maxillary antra and ethmoid air cells. Medial wall blow-out fractures are less common than orbital floor fractures and are somewhat more difficult to diagnose radiographically because of superimposition of the ethmoid air cells.

Clinically, the patient with a blow-out fracture experiences some visual impairment, usually diplopia. This is due to prolapse of orbital contents into the adjacent maxillary antrum or ethmoid air cells or entrapment of one of the external ocular muscles in the fracture with impairment of movement of the eyeball.

Radiographically, blow-out fractures are often difficult to detect, especially since the orbital rim is usually not fractured. Since these fractures occur in areas where bone is extremely thin, the actual bony fragments are seldom well outlined. The following radiographic features may occur singly or in combination: (a) a polypoid soft tissue mass in the upper portion of the maxillary antrum; (b) downward or medial displacement of spicules of bone; (c) opacification of the antrum from hemorrhage; and (d) orbital emphysema.

The most useful projection for demonstration of orbital blow-out fractures is the stereo Water's projection, preferably in the erect position. In difficult cases, varying the angulation of the head may be helpful. Laminagraphy, if available, is invaluable as a diagnostic tool and may help to demonstrate a fracture not observed on the standard films but clinically suspected. Sections are obtained at 0.5 cm. intervals in the PA or Water's projection.

Two cases are presented which illustrate orbital blow-out fractures. See Figures 1 and 2.

★★★

969 Lakeland Drive (39216)

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, St. Dominic Hospital, Jackson, Miss.



Figure 1. This patient was struck in the right eye with a baseball. Note the soft tissue mass in the upper portion of the right maxillary antrum (arrow). Note also the air-fluid level in the antrum, presumably from hemorrhage. No orbital rim fracture is present.



Figure 2. This film demonstrates an orbital floor blow-out fracture in a patient struck in the right eye with a fist. Note the soft tissue mass. The actual radiographs demonstrated faint but definite bony spicules in the antrum. Also note the orbital emphysema (upper arrow).

FOR APPEARANCES ONLY

A couple were sitting at a restaurant table enjoying cocktails. Suddenly the waiter ran to the table.

"Madam," the waiter exclaimed, "your husband just slid under the table!"

"No," the lady replied, "my husband just walked in the door!"



The President Speaking

"Continuing Medical Education"

CHARLES R. JENKINS, M.D.
Laurel, Mississippi

THE SUBJECT OF continuing medical education by practicing physicians has become one of the major projects of the American Medical Association, 30-odd state societies and also the Joint Commission on Accreditation of Hospitals. Dr. Dennis Ward (chairman of the MSMA Council on Education), Mr. Charles Mathews and your president attended a three-day conference and workshop in Chicago Oct. 24-26. There we met and discussed the various problems with representatives of the AMA and most of the component state medical societies. We became aware of what other states are doing and of the many problems that arise in implementing a continuing medical education program.

I will attempt briefly to present the various approaches to the program.

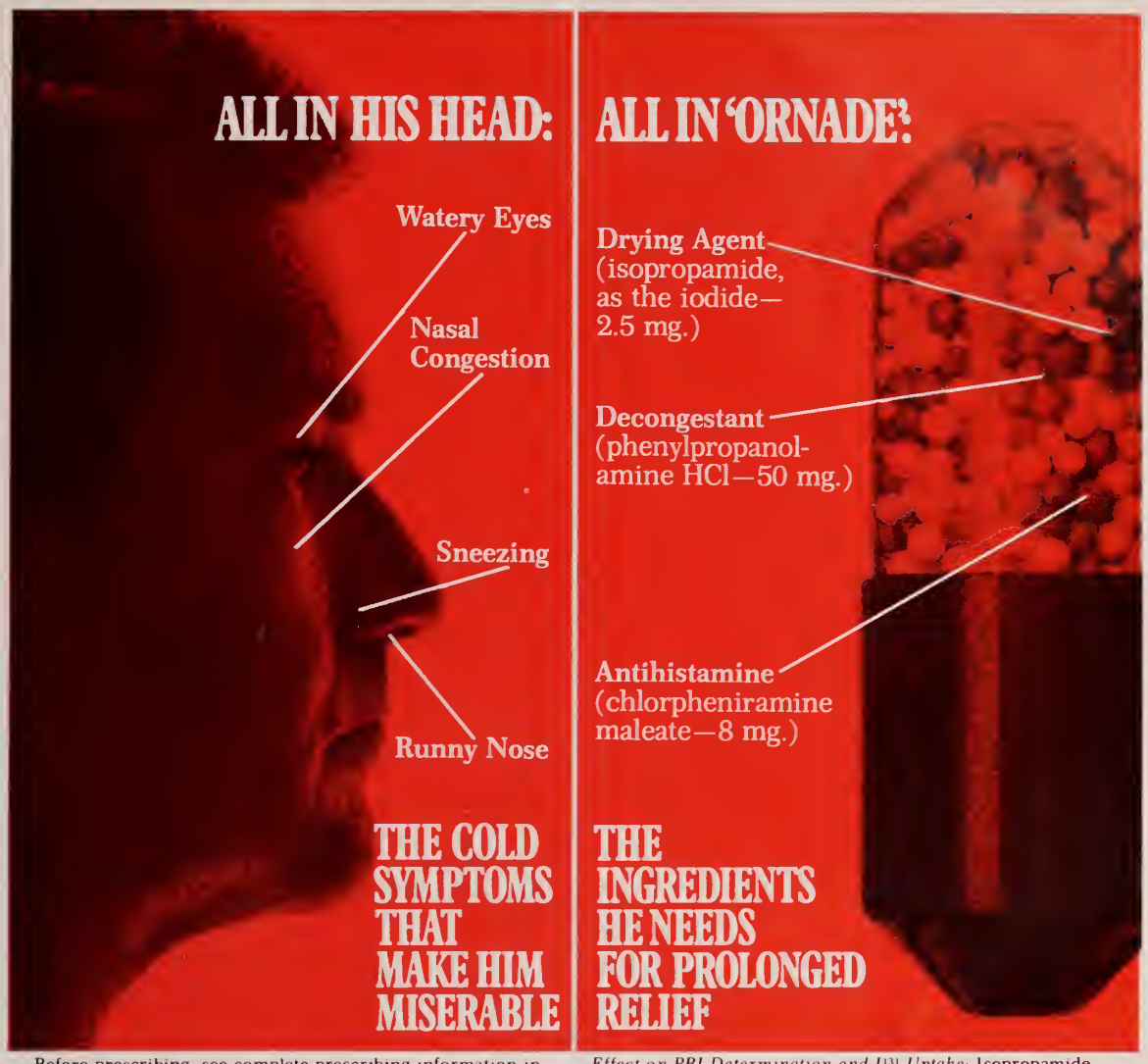
Three states, Kansas, New Mexico and Maryland, have medical practice acts that give the State Board of Medical Examiners authority to require evidence of continuing medical education as a condition for reregistration of the license to practice medicine. The New Mexico Board of Medical Examiners is the only one that is putting this legislative authority in effect.

Six state medical associations, Oregon, Arizona, Pennsylvania, New Jersey, Massachusetts and Florida, have made a policy decision that will have the effect of requiring continuing medical education as a condition for membership.

The AMA for the past few years has issued a Physician's Recognition Award as a means of documenting continuing medical education for all physicians in any field of medicine. They will continue to do this but are encouraging state associations to establish an accredited program for CME. Each state will establish its own criteria. This, if approved by the AMA, will qualify the practitioner for the AMA award. At present the AMA has approved the CME programs of the American Academy of Family Physicians and the state associations of Oregon, Arizona, Pennsylvania and California.

One of the best and most comprehensive programs is that of the California Medical Association. They began planning their program in 1967 and implemented it as a voluntary program in 1970. One of the major features of this program was the allowance of Category I credit for participation in an accredited community hospital continuing medical education program. The CMA developed guiding principles to serve as the basis for the accreditation program. The accreditation committee of the CMA conducts on-site visits to hospitals that are establishing such a program and assists them in their planning. They give one-year provisional accreditation and if the planned approved program is put into effect there, the hospital is revisited in one year and a full three-year accreditation license is issued.

(Turn to page 505)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*

Indications: Upper respiratory congestion and hypersecretion associated with the common cold; acute and chronic sinusitis; vasomotor rhinitis; allergic rhinitis (hay fever, "rose fever," etc.).

Contraindications: Hypersensitivity to any component, concurrent MAO inhibitor therapy; severe hypertension; bronchial asthma, coronary artery disease; stenosing peptic ulcer; pyloroduodenal or bladder neck obstruction. Children under 6.

Warnings: Advise vehicle or machine operators of possible drowsiness. Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy. In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

Effect on PBI Determination and I^{131} Uptake: Isopropamide iodide may alter PBI test results and will suppress I^{131} uptake. Substitute thyroid tests unaffected by exogenous iodides.

Precautions: Use cautiously in persons with cardiovascular disease, glaucoma, prostatic hypertrophy, hyperthyroidism.

Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth; nervousness; or insomnia. Also, nausea, vomiting, epigastric distress, diarrhea, rash, dizziness, weakness, chest tightness, angina pain, abdominal pain, irritability, palpitation, headache, incoordination, tremor, dysuria, difficulty in urination, thrombocytopenia, leukopenia, convulsions, hypertension, hypotension, anorexia, constipation, visual disturbances, iodine toxicity (acne, parotitis).

Supplied: Bottles of 50 capsules.

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UNCOMMON RELIEF FOR COLD SYMPTOMS

If you've seen one, have you really seen them all?

The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four months. Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.

Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen***).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect).

1st choice: An estrogen-dominant O.C. (such as **Enovid-E***).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen***).

Age 21, short, mammose, with normal menses, some acne. Was put on prenuptial regimen of 50-mcg.-estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency.

1st choice: Switch to a 100-mcg.-estrogen combination (such as Enovid-E* or a sequential).



Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough...or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg.-estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E*** or **Ovulen*** or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen***).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

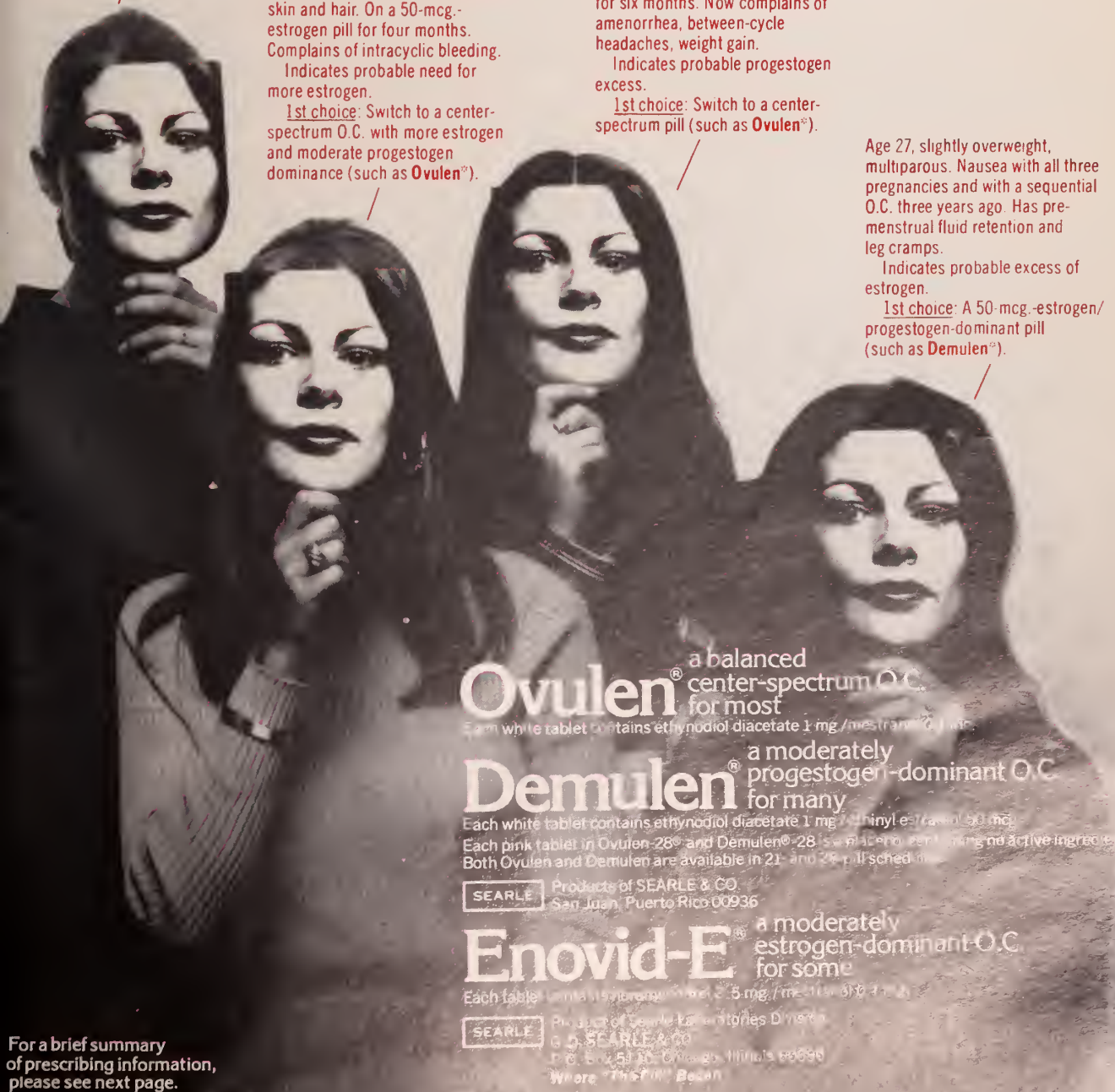
Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen***).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen.

1st choice: A 50-mcg.-estrogen/progestogen-dominant pill (such as **Demulen***).



Ovulen® a balanced center-spectrum O.C. for most

Each white tablet contains ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen® a moderately progestogen-dominant O.C. for many

Each white tablet contains ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.
Each pink tablet in Ovulen-28® and Demulen®-28 contains identical ingredients, but no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.

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Where "The Pill" Began

For a brief summary of prescribing information, please see next page.

a family of O.C. products to help you match the right pill to the right patient

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Each white tablet contains
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Demulen®

Each white tablet contains
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Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions – Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note – Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication – Ovulen and Demulen are indicated for oral contraception.

Contraindications – Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings – The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions – The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations pre-existing uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives – A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E., Masi, A. T., Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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JOURNAL OF THE
MISSISSIPPI STATE
MEDICAL ASSOCIATION

VOLUME XIII, NUMBER 12
DECEMBER 1972

EDITORIALS

Address of the Governor

The Honorable WILLIAM L. WALLER
Jackson, Mississippi

LADIES AND GENTLEMEN, it gives me a great deal of pleasure to address you here today because I believe the business you are in—public health—is tremendously important to Mississippi.

When I was elected governor almost one year ago, and as a candidate in 1967 and 1971, my staff and I began looking into the vital needs of our state.

We found three major areas that I felt should receive major emphasis during my administration. These were: *Economic development,* increasing the per capita income of our people; *education,* increasing the education and thereby the ability of our people to earn and lead productive lives; and *health care,* improving availability of health care for our people.

Our state has come a long way since 1877 when the Mississippi Legislature created the Mississippi State Board of Health.

In these past 95 years health care in Mississippi has come a long way. In 1877, only a few years after the Civil War, public health care in this country was in its infancy.

Today Mississippi has a positive public health care program for its citizens. Today your state board of health has some 425 central office personnel plus local health departments in all 82 counties—with over 725 employees—providing a host of comprehensive health services to our people.

I want to commend you, Dr. Cottrell, the members of your state board and each of the county health officials here today. You have done an outstanding job in light of the demands that have been placed upon you.

Through the efforts of the State Board of Health, diseases which once threatened or took the lives of many Mississippians each year have been reduced to notes for the history books. We are making progress.

As I said before, we began this administration with three main goals: Improving each family's economy, education, and health.

I believe I can say here today that our state is making significant economic progress. The State Legislature enacted the largest public works program in the history of our state, and as of September, capital investment in new and expanded industries in our state has climbed to over $830 million—with the possibility of one billion in sight. This compares with the highest recorded total of $286 million.

Now I believe is the time for Mississippi to take a long hard look at our health delivery systems.

Americans in all parts of this nation and particularly here in Mississippi are demanding that we do a better job of spending their tax dollars.

Presented to the Mississippi Public Health Association State Convention, Oct. 19, 1972, Heidelberg Hotel, Jackson, Miss.

My vetoes of the OEO funding grants for so-called comprehensive health care programs here in Jackson and Mound Bayou created a great deal of controversy, but I remain convinced that the taxpayer deserves to be treated with some degree of equity, too. I believe they deserve to get a dollar's worth of health care service for every tax dollar they pay, rather than having this money siphoned off in high bureaucratic salaries and non-productive expenses. The Mound Bayou appropriation was $5.5 million for one area while the State Board of Health last year got $14.5 million for all 82 counties.

I believe the voters and taxpayers are demanding efficient use of their tax dollars, both federal and state.

For these reasons we recently undertook a study of our health care programs in Mississippi with a view toward making recommendations to the 1973 legislature.

While our study is not complete, nor have we determined the best method by which we can improve our health care delivery system, one fact is clear.

In 1970, there were 52 different agencies in our state involved in the delivery of health care services spending close to $78 million.

Two years later the number of agencies involved has grown to 65 with total expenditures of over $147 million in fiscal 1972.

It is immediately apparent that there is needless duplication of effort and overlapping.

I believe I should point out here that the total budget of the State Board of Health is only $14.5 million for 1972. Of this 46 per cent is federal funds; 31 per cent state funds; 18 per cent local funds and 5 per cent from fees and refunds.

In addition to this obvious need for reorganization, our state today faces a severe shortage of health resources. We are not delivering enough new hospital beds. Also in relation to our population the latest national figures indicate that our state has only 48 per cent as many doctors as the rest of the nation; only 55 per cent as many dentists; only 50 per cent as many registered nurses; and only 40 per cent as many nursing home beds.

In short, I believe the time has come for all Mississippians to get behind a program in the 1973 legislature to take a hard look at reorganization of our health care delivery systems in Mississippi, plus a program to train more doctors, nurses and dentists.

We have reached a dramatic point in our development where we mastered the food and shelter shortages of the thirties and forties and where we sought and obtained a better educational system in most parts of the nation and where we have been able to offer improved career opportunities for people and better social security and retirement and even in recent years Medicare and Medicaid, but we have done very little to fill the void of providing reasonable health care at a cost which an average individual can afford. Moreover, we have allowed individual Mississippians to become absorbed with fear—fear that they cannot afford a $50.00 per day hospital room and the other related expenses to a serious illness. This fear is increasing because medical costs are increasing almost daily.

Now we need to reorganize the health care delivery product but after this is done, will we solve the problem? Yes—we will solve the problem of outpatient care and treatment and we will make an inroad. The deplorable state of affairs on the cost of health care requires drastic action, in my opinion.

Such action as that could be taken by the federal government by giving tax credits or investment credits to individuals who would build nursing homes, hospitals or equip existing facilities with modern medical devices. Also we must have additional facilities for training not only doctors and nurses, but other people in the medical field. We may have reached the time in history where there must be a profession created between that of nurse and doctor to take some of



"I think he's passed the crisis."

the load off the medical doctor himself. Also, we must increase the educational facilities in the medical field. There are several nursing schools and several contemplated in Mississippi. There are some 500 young Mississippians turned away from medical schools in this state and in other states each year. As pointed out above, we cannot afford to continue dropping in the doctor-population ratio or in the dentist-population ratio. We have nothing to report other than hard work in the field at this time, and we are working hard to see if it is not feasible for Mississippi to augment a dental school in the immediate future. We are the only state in the southeastern area which does not have a dental school, and as pointed out, our dentist population is not improving. Drastic action must be taken, and I see enough talent in this room to help Mississippi come to the front in new and dramatic plans for solving the health care dilemma. Won't you talk with your legislator and help us recreate the health care delivery service in Mississippi within the next 12 months? ★★★

PRESIDENT *(Continued)*

The CMA accreditation program is based upon:

(1) A commitment by the hospital governing board and medical staff to an effective program in continuing medical education.

(2) Assessment of educational needs as demonstrated by quality of patient-care evaluation.

(3) Educational programs based upon demonstrated needs and relevant to the work done in the hospital.

(4) Evaluation of the effect of the educational program in terms of its impact upon the quality of patient care.

The CMA program has been very well received by the physicians, lay press, hospital boards, etc. The lay press has been very complimentary and the California physicians I talked to say it has improved the image of the physician with the general public.

Our primary purpose as physicians should always be to improve patient care and we should dedicate ourselves to this goal. If this necessitates changes, then let us make the changes. A continuing education program in our Mississippi hospitals tailored to improve our skills and enable us to render better patient care should receive the highest priority in our planning. ★★★



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POSTGRADUATE CALENDAR

MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Jan. 8-12, 1973

ELECTROCARDIOGRAPHY INTENSIVE COURSE
University Medical Center, Jackson
January 8-12, 1973, beginning at 8 a.m.
Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:
Thomas M. Blake, M.D., professor of medicine, The University of Mississippi School of Medicine

This one-week intensive course will feature a series of discussions in selected topics in electrocardiography selected on the basis of their immediate clinical applicability. Participants will work with electrocardiograms, slides and other visual aids. The one-week intensive course series for Mississippi family physicians is offered through the Mississippi Regional Medical Program-funded UMC Mississippi Postgraduate Institute in the Medical Sciences. Registration per session is limited to five physicians enrolled in the institute.

FUTURE CALENDAR

Jan. 8-12, 1973
ELECTROCARDIOGRAPHY INTENSIVE COURSE

Jan. 22-26
GASTROENTEROLOGY INTENSIVE COURSE

Mar. 7
RENAL SEMINAR

Mar. 8-9
OBSTETRICS AND GYNECOLOGY COURSE (TENTATIVE)

April 23-27
RADIOLOGY INTENSIVE COURSE

April 30-May 3
MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

NEW MEMBERS

ALDRIDGE, KATHERINE A., Hattiesburg. Born Hattiesburg, Miss., Nov. 25, 1937; M.D., Tulane University School of Medicine, New Orleans, La., 1963; interned Charity Hospital, New Orleans, La., one year; anesthesiology residency, same, July 1, 1964-June 30, 1967; elected by South Mississippi Medical Society.

AQUINO, ANDRES D., Meridian. Born in the Philippines, July 14, 1931; M.D., University of Santo Tomas College of Medicine, Manila, Philippines, 1955; interned, same, for one year; interned St. Francis Hospital, La Crosse, Wis., Dec. 1, 1956-Dec. 1, 1957; pathology residency, Baptist Memorial Hospital, Memphis, Tenn., Jan. 1, 1958-Dec. 30, 1962; elected by East Mississippi Medical Society.

DAVIS, WOODY DEAN, Meridian. Born Quitman, Miss., June 23, 1940; M.D., University of Mississippi School of Medicine, Jackson, Miss., 1966; interned, same, for one year; ophthalmology residency, 1969-1972, same; elected by East Mississippi Medical Society.

GILES, HANNELORE H., Hattiesburg. Born New Orleans, La., Nov. 26, 1935; M.D., Louisiana State University School of Medicine, New Orleans, La., 1963; interned Southern Baptist Hospital, New Orleans, La., one year; internal medicine residency, V.A. Hospital, New Orleans, La., July 1, 1964-June 30, 1966; cardiology fellowship, University of Tennessee, Memphis, Tenn., July 1, 1966-June 30, 1968; elected by South Mississippi Medical Society.

LANDEEN, JAMES M., Laurel. Born Rock Springs, Wyo., Sept. 22, 1935; M.D., University of Missouri School of Medicine, Columbia, Mo., 1965; interned Kansas City General Hospital, Kansas City, Mo., one year; surgery residency, Tucson Hospital, Tucson, Ariz., July 1, 1966-June 30, 1967; otolaryngology residency, University Medical Center, Jackson, Miss., July 1, 1967-June 30, 1970; elected by South Mississippi Medical Society.

SELMAN, FRANCIS J., JR., Biloxi. Born New Orleans, La., Sept. 14, 1939; M.D., Tulane University School of Medicine, New Orleans, La., 1965; interned Charity Hospital, New Orleans, La., one year; urology residency, same, July 1, 1966-June 30, 1967; urology residency, Lahey Clinic, Boston, Mass., July 1, 1968-June 30, 1971; elected by Singing River Medical Society.

Delta Medical Holds Semi-annual Meet

The Delta Medical Society held its 98th semi-annual meeting Oct. 11 at Delta State College's Caylor Hall in Cleveland.

Highlighting the scientific program were Mr. Kenneth Fairley, director of the Mississippi Bureau of Narcotics and Dangerous Drugs, who spoke on the "Mississippi Drug Scene"; and Dr. William L. Jaquith, director of the Mississippi State Hospital at Whitfield, who discussed "Medical Aspects of Drug Abuse."

Dr. Charles R. Jenkins of Laurel, MSMA president, addressed the society during its business session.

New officers elected were Dr. Clyde Smith of Greenwood, president; Dr. L. Stacy Davidson, Jr., of Cleveland, president-elect; and Dr. Arthur W. Lindsey, Jr., of Cleveland, vice president for Bolivar County.



Discussing the program at the 98th semiannual meeting of the Delta Medical Society at Cleveland are from left, Dr. Clyde Smith of Greenwood, Delta Medical president, Dr. Charles R. Jenkins of Laurel, MSMA president, and Dr. Lyne S. Gamble of Greenville, District I Trustee.

Other officers are Dr. Walter H. Rose of Indianola, secretary-treasurer; Dr. Thomas J. Barkley of Belzoni, vice president for Humphreys County; Dr. Fred M. Sandifer, Jr., of Greenwood, vice president for Leflore County; Dr. Robert N. Hurt of Indianola, vice president for Sunflower County; and Dr. John C. Suares of Greenville, vice president for Washington County.

MSMA Trustee for District I is Dr. Lyne S. Gamble of Greenville.



DEATHS

DAWKINS, WILLIAM HUDDLESTON, Whitfield. M.D., University of Mississippi School of Medicine, Jackson, Miss., 1963; interned Mississippi Baptist Hospital, Jackson, Miss., one year; died October, 1972, age 35.

PERSONALS

HOWARD B. CHEEK, JAMES D. GORDON, KENNETH N. REED, and J. GEORGE SMITH of Jackson announce the relocation of their office, The Ear, Nose and Throat Surgical Group, P.A., at Suite 315, St. Dominic Medical Offices, 971 Lakeland Drive, for the practice of otolaryngology, maxillofacial surgery and facial plastic surgery.

J. HAROLD CONN of Jackson was elected president of the Association of Veterans Administration Surgeons at the annual meeting in San Francisco.

JAMES EDGAR CUNNINGHAM announces the opening of his office for the practice of internal medicine at 110 Washington Street in Booneville.

MARIAN H. GODBEY of Aberdeen received a certificate from the American Cancer Society, Mississippi Division, for outstanding service with the South Monroe County volunteers in the area of professional education.

GEORGE C. HAMILTON, JR., of Jackson has been elected to membership in the Southern Psychiatric Association.

KARL W. HATTEN of Vicksburg has been elected to the Board of Directors of the Vicksburg and Warren County Chamber of Commerce. Dr. Hatten also reviewed "The Optimist's Daughter" by Eudora Welty for the Vicksburg Book Club.

DONALD IMRIE of Vicksburg was in charge of United Givers Fund for physicians in Vicksburg.

CHARLES R. JENKINS of Laurel, MSMA president, was honored in Laurel with "Dr. C. R. Jenkins Day" by the Laurel Medical Society and Auxiliary.

WAYNE A. LINDSEY announces the opening of his office for the general practice of medicine at 211 First Street in Booneville.

CHARLES E. MANGIN of Jackson announces the relocation of his offices for the practice of pediatrics to 359 North Mart Plaza.

ROBERT R. MCGEE of Clarksdale has been elected to the Coahoma County Chamber of Commerce board of directors for a three-year term.

RICHARD C. MILLER of Jackson presented a paper before the section on surgery at the 41st annual meeting of the American Academy of Pediatrics in New York.

PAUL H. MOORE of Pascagoula has been named vice president of the University of Mississippi Alumni Association.

MARGARET MORRISON, medical director of the Meridian City Schools, has been named Boss of the Year by the Pinnacle chapter, American Business Women's Association.

BRANTLEY B. PACE of Monticello has been named to the advisory board of directors of the Monticello branch of Deposit Guaranty National Bank.

BERNARD S. PATRICK of Jackson took office as president of the Congress of Neurological Surgeons at the group's Denver conference in October.

ERNEST P. REEVES of Collins is serving as a director of Guaranty Savings and Loan Association.

ROBERT M. RITTER of Whitfield made the graduation address at Southwest Mississippi Junior College in McComb for the class of practical nurses.

CURTIS ROBERTS of Jackson has been elected chief of staff for 1972-74 at Rankin General Hospital. Others elected were ROBERT RESTER of Jackson, vice chief of staff, and ROLAND SAMSON of Jackson, secretary. Serving on the Executive Committee with the officers are ALBERT AZORDEGAN, chief of surgery, and NANCY BURROW, chief of medicine.

JAMES T. TRAPP has associated with A. JACK STACY, JR., and JOHN M. BLAKEY for the practice of radiology at 835 South Gloster Street in Tupelo.

ALLISON RANDLE WHITE, JR., a native of Starkville, has been certified by and is now a diplomate of the American Board of Internal Medicine. He plans to practice in Greenville when finished with his residency at the University of Mississippi Medical Center.

FRANK A. WOOD of Jackson recently took office as president of the American Cancer Society, Mississippi Division.

New officers for the Southwest Mississippi General Hospital in McComb are J. O. WOOD, chief of staff-elect; JULIAN JANES, chief of staff; and JAMES M. HOWARD, secretary-treasurer.

French Neurosurgeon Visits Medical Center



Dr. Jacques Le Beau, right, distinguished neurosurgeon from the University of Paris, France, was visiting professor of neurosurgery at The University of Mississippi School of Medicine in October. Department chairman Dr. O. J. Andy, left, speaks with Dr. Le Beau during his stay. The visiting professor, who is on the Faculty of Medicine Pitie-Salpetriere, also spoke to the Mississippi Neurological Society.

Camp for Juvenile Diabetics Planned

A one week camp for juvenile diabetics, ages 10-18 years, is being planned for June 1973. The camp will be held on the campus of the University of Southern Mississippi in Hattiesburg.

The threefold purpose of the camp is to: (1) provide supervised recreation and activity for the campers; (2) reinforce learning or teach the camper how to care for himself: and (3) support the child in accepting his disease and the problems it presents.

Dr. Willie Huddleston is medical advisor of the Diabetic Camp Planning Committee.

If you have a patient who could benefit by this program; or if you would like additional information please write: Dr. Sarah Weaver, Dean, School of Home Economics, University of Southern Mississippi, Hattiesburg, Miss. 39401.



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Book Reviews

Review of Medical Pharmacology. Ed. 3. By Frederick H. Myers, M.D., Ernest Jawetz, Ph.D., M.D., and Alan Goldfien, M.D. 688 pages with illustrations. Los Altos. Calif.: Lange Medical Publications, 1972. $8.50.

Pharmacology is a rapidly changing medical field. Practitioners must keep themselves informed about new drugs and changing concepts of therapy. This requires constant up-dating of one's library.

Lange Medical Publications has recognized this need and are up-dating their "Review of Medical Pharmacology" every two years.

We are indebted to them for this very comprehensive work by outstanding authors. They have provided a 688 page volume of current information on drugs, therapeutics and environmental toxic agents at the price of $8.50.

The book is divided into eight parts: Part I deals with pharmaco-kinetics and drug interactions, clinical evaluation of drugs, technics of drug administrations, toxicology of therapeutic agents and drug abuse; Part II—autonomic and cardiovascular drugs; Part III—central nervous system drugs; Part IV—systemic drugs; Part V—endocrine drugs; Part VI—drugs used in treatment of nutritional and metabolic derangements; Part VII—chemotherapeutic agents; and Part VIII—toxicology (which contains a section on environmental toxic agents.

There are also many valuable tables and an excellent index.

The authors show expertise not only in their subject, but also in the manner of presentation.

The book is highly recommended as a student text and as a means for every practitioner to stay abreast of modern therapeutics.

JOSEPH B. ROGERS, Phc-BS Phar., M.D.
Oxford, Miss.

Mental Health Training and Public Health Manpower. By Stephen E. Goldston, M.S.P.H., and Elena Padilla, Ph.D., 294 pages, Rockville, Md.: National Institute of Mental Health, 1971. $2.75.

"This book is based on findings of a research project about professional public health workers." It was financed by N.I.M.H. and took the authors three or four years to write. The data gathering and processing work was contracted to a private company.

The 13 chapters cover some of the following overview of the schools of public health in which the diversity of professions is mentioned. Here the continuing need to infuse mental health concepts and practices into public health work is stressed. Other chapters deal with describing the public health trainee, assessment of mental health training and mental health training needs.

Some interesting statements or findings were noted in the book. The B.S. degree is the highest reached for 58 per cent of public health school enrollees. Only 30 per cent had prior mental health experience, and 69 per cent felt no need for mental health training; 22 per cent of respondents in the study were administrators, and 32 per cent had executive-administrator roles. Only 1,970 were directly engaged in patient care and 61 per cent were employed by the government.

The authors made their point that more federal money should be given to schools of public health, that strings should be tied to these grants to insure more teaching of mental health concepts. They did not, however, give any example, explain, or even speculate how this would reach those who treat mentally ill persons or aid these mentally ill persons directly.

JERRY M. ROSS, M.D., Whitfield, Miss.

ACCP Inducts Three State Physicians

Drs. Roland B. Robertson, Jr. of Jackson; John D. Morgan of McComb; and William C. Kellum of Tupelo have been named Fellows of the American College of Chest Physicians, the international medical society of cardiopulmonary physicians. They were inducted as Fellows at convocation ceremonies during the College's recent annual Scientific Assembly in Denver, Colo.

This special recognition by the college is conferred on physicians to mark their fulfillment of the highest professional standards in the cardiopulmonary field.

Iron therapy for anemia is almost as old as history itself



Celsus's empirical use of iron

Aulus Cornelius Celsus recommended an unusual form of iron therapy for the treatment of enlarged spleens—the oral administration of water that blacksmiths had used for dousing white-hot iron.

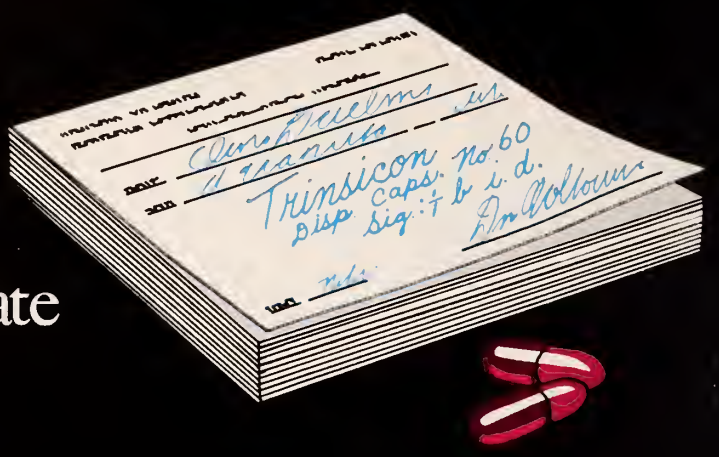
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(See reverse side for prescribing information.)

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Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	240 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin	7.5 mcg.

(The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)

Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	0.5 mg.

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B_{12} progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500 and in Identi-Dose® (unit dose medication, Lilly) in boxes of 100.

[0000-71]

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A Comprehensive Hematinic

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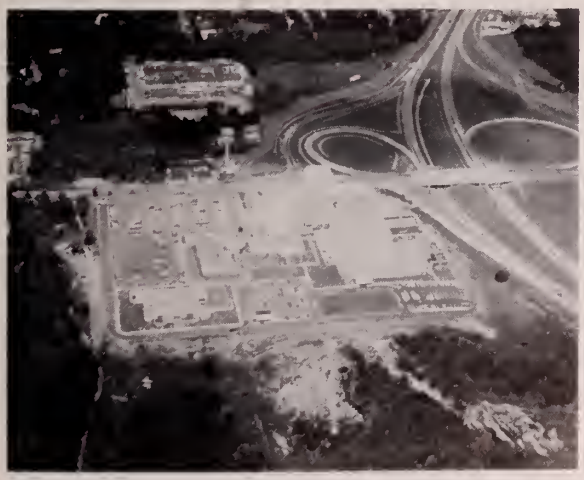
Jackson Area Hospitals Add More Beds, Offer Specialized Facilities

Keeping pace with Jackson's population growth and industrial expansion as the state's capital, hospitals in the area are in the process of construction and expansion. St. Dominic, Hinds General, Doctors and the University hospitals have major additions underway while Mississippi Baptist Hospital plans a whole new facility.

In addition, a 56-bed psychiatric hospital was recently opened and the Veterans Administration Center plans a new research wing in the near future.

When all are completed, Jackson health care facilities will have over 2500 beds and offer complete services in every specialty area.

St. Dominic-Jackson Memorial Hospital has completed its new 200-bed addition and is now remodeling the original structure to bring the north wing up to the same standard of patient care as the new part. When finished, this health care facility will have 400 beds plus the Jackson Mental Health and Mental Retardation Center which is located on the grounds.



This is an aerial view of the St. Dominic-Jackson Memorial Hospital health complex which is located off Interstate 55 North on Lakeland Drive.



This new wing, located in front of the original structure on the north lawn of St. Dominic Hospital, will house five stories of office space for some 60 physicians.

The original north entrance of the hospital is being transformed into an admitting lobby for incoming patients and the Emergency Room. The main visitors' lobby is now located in the new south wing entrance.

Third floor of the old building will house surgery, recovery, the coronary care unit, intensive care unit and a concentrated care area. The post-ICU-CCU unit will provide monitoring by telemetry.

In front of the original structure on the north lawn, a 5-story building, St. Dominic-Jackson Medical Offices, will contain office space for 60 physicians. Parking space will also be expanded with a 3-level parking garage. A covered walkway

to the original structure will be constructed between the first and third floors.

Other special features incorporated in the expansion are a new emergency department with full-time physician staffing, new and better radiology facilities, completely automated materials handling with the Amscars (self-propelled robots), and Allander clean air curtains in surgery (see JMSMA, July 1972, p. 319-321).

Completion is planned in the spring of 1973 and cost of the expansion and renovation is estimated at $17 million.

Besides a nursing school, the hospital has training programs in medical technology and radiologic technology (in cooperation with Millsaps College).

Sister Josephine Therese is administrator.



The Jackson Mental Health Center is located on the grounds of St. Dominic Hospital and serves patients from the greater Jackson metropolitan area. The center was opened in 1971.

The proposed new Mississippi Baptist Hospital is a six-story-with-basement structure of half a million square feet of floor space, a facility representing a $25,000,000 investment.

It will be located on a six-acre tract on the northwestern corner of the intersection of North State Street and Manship Street, a site once occupied by Jackson Charity Hospital, and diagonally across the street from the existing hospital. The present facility will be transformed into an extended care facility, according to plans announced earlier.

The new hospital will contain 600 beds and is scheduled for completion in late 1975. The top four floors will be composed of four Y-shaped wings with a nursing station in the fork of each Y. Each wing will house 36 patients, or 144 patients on each floor.

Every nursing station will serve 28 private and four semi-private rooms, giving the hospital a total of 448 private rooms and 64 semi-private rooms.

The three bottom levels (first and second floor and the basement) will be rectangular in shape and will be larger than the four patient floors.

Second floor will include the surgical suite, radiography complex, radio-isotope rooms, clinical laboratories, heart catheterization unit and other facilities.

First floor will be administrative offices, admitting office, lobby, accounting office, personnel office, purchasing, cafeteria for 400, a chapel and gift shop.

Also on the first floor will be the emergency suite of 18 rooms, lab and observation area, inhalation therapy unit, exercise and hydrotherapy area and outpatient clinic which includes eight examining rooms, one room for eye examination and two electroencephalogram rooms.

The basement, actually at ground level, will include the dietary kitchen, maintenance engineering, supply, medical records, pharmacy and housekeeping.

The surgery suite on the second floor includes 12 major operating rooms, plus three special rooms for open heart surgery, three cysto rooms, one glass-enclosed room for total hip replacement, three rooms with air curtains, and a heart catheterization unit.

The radiography complex on the second floor will contain 17 rooms for specialized procedures, the radio-isotope area, laboratories and storage.

The third floor includes the hospital's intensive care unit (32 beds), coronary care unit (24 beds), a six-bed burn unit and two Y-shaped wings.

Labor and delivery area with 10 beds, a 36-bed postpartum room, newborn nursery and two Y-shaped wings will be located on the fourth floor.



This is the architect's rendering of the new Mississippi Baptist Hospital, a six story with basement structure to be located at the intersection of North State and Manship streets.

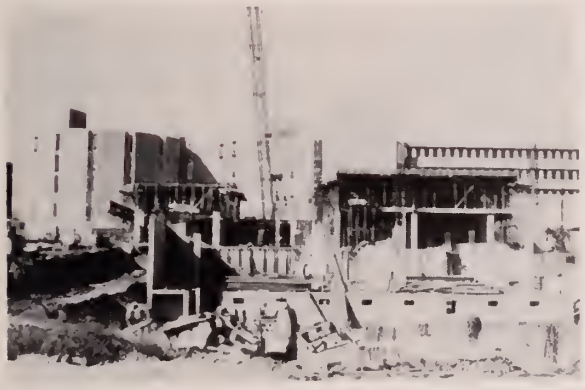
The fifth floor will include a 19-bed unit designed for adolescents, six-bed pediatric intensive care unit, other special pediatric units and two Y-shaped wings.

A three-level parking garage to accommodate 800 cars is also planned.

Mr. Paul J. Pryor is administrator.

Construction is underway at the University Medical Center campus on the new Mississippi Methodist Rehabilitation Center. The center will be a 60-bed, 90,000 square foot comprehensive rehabilitation facility. It will primarily treat muscular, skeletal and neuromuscular problems and will cost approximately $5,000,000. Estimated date of completion is early spring of 1974.

The facility, under the auspices of the Board of Trustees of the Mississippi Methodist Rehabilitation Center with support from the Vocational Rehabilitation Division, Department of Education, state of Mississippi, will establish academic affiliations and programs with the University of Mississippi Medical Center.



Construction is in progress on the Mississippi Methodist Rehabilitation Center to be located next to the University Medical Center. Note the UMC round pediatric hospital in the background.

The facility will treat patients in the following disease categories: stroke, spinal cord injury, arthritis, amputations, problem fractures, heart and lung diseases.

The emphasis on disease categories rather than on departmental objectives (i.e. surgery, medicine, pediatrics) will allow establishment of statewide programs in rehabilitation with training of personnel in medicine on a doctorate and postdoctorate level as well as strong educational programs in all areas of health related sciences, according to Dr. Guy T. Vise, Jr., medical director.

This facility will have a four-story patient and services tower that will be connected horizontally on two levels to the present pediatric south wing of the medical center. The actual hospital will span part of the ground between the center and the VA Hospital. In addition to the 60-bed inpatient facility, an extensive outpatient department is being planned which will serve as a statewide referral center for patients with the previously mentioned diseases and injuries.

Patient services will include medical and surgical care, nursing, physical therapy, occupational therapy, prosthetics, orthotics, psychology, speech therapy, social services, ministerial guidance, and a bio-medical engineering service. In addition, vocational evaluation and training will be carried out simultaneously on selected patients by the Division of Vocational Rehabilitation.

Construction began in May 1972 and foundation has been poured for a total of eight stories, although initially only four stories are being built. Long range plans include an eventual two twin eight story towers with an estimated bed capacity of 250-300. Additional disease categories and expansion of the present services are projected for 1975 and 1976.

Mr. Earl Wilson of Jackson is chairman of the Board of Trustees.

Doctors Hospital of Jackson is adding a new wing in front of the present structure which will contain 30 beds and cost approximately $700,000. Doctors Hospital currently has 120 beds and employs about 208 people.

The addition will house all private rooms and one suite. Other construction planned includes a new laundry in back of the building and expanded service areas and storage.

The present 14-bed psychiatric unit is undergoing remodeling to convert it to a 16-bed comprehensive care unit. There will be 16 private suites with baths and monitoring capability and the area will be used as a coronary care unit and for acutely ill or postoperative patients.



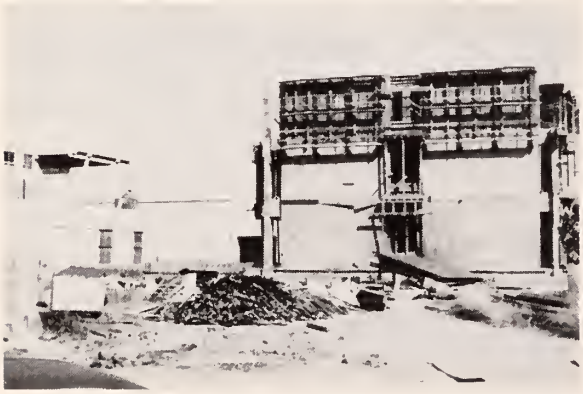
Doctors Hospital is pictured with construction beginning on the new wing in front of the present structure. The wing will contain 30 beds and cost approximately $700,000.

This hospital is now owned by Extendicare which operates some 49 hospitals in 13 southeastern states adding up to 5,000 beds.

Mr. Beau Fournet is administrator.

Hinds General Hospital, the only facility located in South Jackson, will add 300 beds to the present 158 in a six-floor addition scheduled for completion in approximately 18 months. Construction was planned after an extensive survey of needs in the community and surrounding area, according to Mr. Kenneth Barlow, director of public information at Hinds.

The basement or underground floor of the addition will contain parking for physicians, as well as central supply, autopsy, medical records, x-ray storage, air conditioning and heating units.



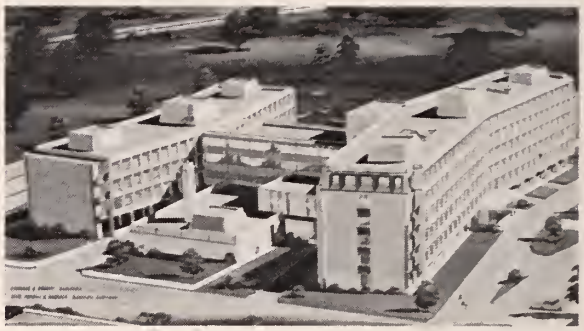
The six-floor addition to Hinds General Hospital is scheduled for completion in some 18 months. The addition will add 300 beds to the present 158.

The second and sixth floors of the new wing will open as soon as possible and the remaining floors will open as needed, each containing 58 beds. The sixth floor will house a minimum-care unit designed to accommodate ambulatory patients. This unit will reduce the patient's cost-per-day expense, since the need for nursing will be minimal.

There will also be a coronary care unit in the addition. The new addition will be connected to the original building by a walkway. Nursing administration and other offices will be located on either side of the walkway.

The first floor of the new unit will contain a new and expanded emergency room with full-time physician staffing and heliport facilities, and new facilities for respiratory and physical therapy. Additional parking will be provided for visitors, employees and physicians.

A time-saving feature instituted at Hinds General is the tube system whereby eight-inch containers for medications will travel from the Pharmacy to the patient's floor at a rate of 40 feet per second.



This is the artist's drawing of Hinds General Hospital when the new addition is completed.

Mr. Barlow, who is also Personnel Director, estimates that the hospital will employ 600-700 people when completed. He also pointed out that the hospital provides clinical training for Hinds Junior College students in nursing and respiratory programs.

Mr. Richard H. Malone is President and Chief Executive Officer.

Riverside Hospital, a facility for the treatment of adult psychiatric patients needing inpatient care, is now in operation on Lakeland Drive Extension.

The hospital has 56 beds separated into basic social units. Each unit contains just four private bedrooms around a common living room and bathroom (see JMSMA, October 1971, p. 568-569).



Riverside Hospital, new psychiatric facility recently opened, is located on Lakeland Drive Extension. The hospital has 56 beds separated into basic social units.

A group of 15 Jackson area psychiatrists formed Psychiatric Development Associates to incorporate and build the facility.

Mr. Chandler Clover is administrator.

SUBJECT INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "L," Letters to the Editor; "PP," President's Page; "RS," Radiologic Seminar; "BR," Book Review; the asterisk (*) indicates an original article in the JOURNAL, and the author's name follows the entry in brackets. "Deaths," "Personals," and "New Members" are indexed under the letters "D," "P," and "M" respectively.

Matter pertaining to MSMA is indexed under "Mississippi State Medical Association." For the author index see page 524.

A

Abortion
continuing thoughts on abortion and population control [Dabney] 211-E
Dr. Calvin T. Hull discusses it on radio station WJDX, 237-N
legal morass of American jurisprudence [Kennedy] 59-E
Achrocidin®
stay denied, 122-N
Address of the Governor
text on page 503-E
Aetna Life and Casualty
and West Virginia state medical association develop program, 444-N
Air-Fluidized Bed
is introduced by Milton Roy Company, 480-N
Albany Medical College
plans cruise, 444-N
Alcoholism
new program begun by MSBH, 445-N
Allergy
provocative allergy course scheduled, 455-N
Allied Health Professionals
AMA publishes Allied Medical Education directory, 458-N
Dr. T. E. Freeland named dean of UMC School of Allied Health, 375-N
UMC nurse anesthetist program moves, 526-N
UMC School of Allied Health changes name to School of Health Related Professions, 454-N
American Academy of Family Physicians
Dr. J. J. Wildgen is president, 28-N
Roger Tusken named executive director, 36-N
American Academy of Ophthalmology and Otolaryngology
plans annual meet, 279-N
American Academy of Orthopaedic Surgeons
sponsors course on the knee in sports, 214-N
American Academy of Pediatrics
plans annual meeting, 412-N
plans session in San Diego, 121-N
receives OEO grant, 452-N
recommends reducing lead content in paint, 36-N
seeks early safety closure compliance, 278-N
urges VD consent laws, 368-N
warns about weight gain drugs, 228-N
warns against hexachlorophene, 38-N
American Association for Comprehensive Health Planning
sets December parley, 454-N
American Association of Blood Banks
holds joint congress with ISBT, 179-N
launches blood recruitment program, 30-N
studies blood bank fees, 372-N
American Association of Medical Assistants
announces 1972 exams, 117-N
American Association of Medical Clinics
South Central Region slates meeting, 114-N
taps four Mississippi clinics, 481-N
American Cancer Society
plans First National Conference on Urologic Cancer, 262-N
American College of Cardiology
conducts manpower study, 34-N
Dr. Jetson P. Tatum is fellow, 317-N
American College of Chest Physicians
begins Professor in Residence program, 372-N
inducts three state physicians, 510-N
plans scientific assembly, 406-N
American College of Emergency Physicians
seeks papers and exhibits, 236-N
American College of Gastroenterology
announces 1972 Rorer Awards contest, 228-N
sets postgraduate course, 228-N
American College of Physicians
area internists plan scientific meeting, 112-N
holds emergency personnel course, 102-N
plans scientific session, 108-N
sponsors course on gastroenterology, 29-N
takes three state M.D.s, 72-N
taps two Jackson internists, 236-N
American College of Radiology
offers film series, 36-N
American College of Surgeons
Committee on Trauma honors Dr. R. J. Field, Jr., 237-N
names new governors and officers, 24-N
publishes hospital cancer programs list, 282-N
American Dental Association
sets children's Dental Health Week, 74-N
American EEG Society
clinical EEG course scheduled, 174-N
requests papers, 109-N
American Fertility Society
announces course, 460-N
plans meeting, 76-N
American Geriatrics Society
holds 29th annual meeting, 118-N
organizes Council for Long-Term Care of Geriatric Patients, 401-N
American Hospital Association
encourages fat-modified diets, 121-N
names Dr. Madison B. Brown Acting Chief Executive, 170-N
published new journal, 122-N
publishes hospital safety manual, 452-N
American Medical Association
AMA-ERF check presented to UMC, 280-N
and ANA form national commission, 177-N
Bishop Brunini receives medicine-religion award, 172-N
explores drug abuse complications, 473-N
holds meet on long-term care, 278-N
plans Quality of Life Congress, 120-N
publishes allied medical education directory, 458-N
schedules Congress on Occupational Health, 171-N
Sheen Award deadline announced, 67-N
sponsors Congress on Occupational Health, 372-N
sponsors socioeconomic congress, 112-N
who needs the AMA? [Siegel] 256-E
will cosponsor Israel medical tour, 281-N
would you? [Saffold] 438-E
American Medical Political Action Committee (AMPAC)
Mississippi PAC took three awards, 229-N
American Nurses Association
and AMA form national commission, 177-N
American Rhinologic Society
plans program with LSU School of Medicine, 370-N
American Society of Contemporary Medicine and Surgery
plans meeting, 473-N
Amphetamines
Central Medical Society has moratorium [Kennedy] 20-E

Ocean Springs declares moratorium, 174-N
Anesthesiology
Dr. James F. Arens appointed new UMC anesthesiology department head, 227-N
UMC nurse anesthetist program moves, 526-N
Aneurysm
UMC gets study grant, 68-N
Arens, James F.
appointed new UMC anesthesiology department head, 227-N
Aspiration
of breast cysts [Martin] 255-E

B

Back Pain
new developments in the management of neck and back pain problems [Patrick] *39
Bags, Cooking
MSBH warns about dangers, 212-N
Beacham, A. V.
named to Comprehensive Health Planning council, 406-N
Berkeley Bio-Engineering
expands regional offices, 375-N
Bites
venomous bites and stings in Mississippi [Keegan] *495
Blindness
blindness research grants offered, 102-N
Rehabilitation Center for the Blind opened at UMC, 316-N
the blind child [Hiatt] *249
Blood and Blood Banking
AABB launches blood recruitment program, 30-N
AABB studies blood bank fees, 372-N
a good sleeper for blood banks [Kennedy] 99-E
Blue Cross-Blue Shield
Blue Shield institutes "Reciprocity" program, 120-N
hold annual meeting, 222-N
Book Reviews and Books Received
Anderson, W. A. D.: Pathology, Volumes 1 and 2. Sixth edition [Philpot] 361-BR
Burch, George E. and Winsor, Travis: A Primer of Electrocardiography [Taylor] 257-BR
Cowdry, E. V. and Steinberg, Franz U.: The Care of the Geriatric Patient [Dill] 69-BR
deCastro, Fernando J. and Rolfe, Ursula T.: The Pediatric Nurse Practitioner [Abney] 403-BR
Dreisbach, Robert H.: Handbook of Poisoning: Diagnosis and Treatment. Seventh edition [Jackson] 171-BR
Froelich, R. E. and Bishop, F. Marian: Medical Interviewing—A Programmed Manual. Second edition [Tyson] 221-BR
Goldman, Leon and Rockwell, R. James, Jr.: Lasers in Medicine [Blount] 477-BR
Goldston, S. E. and Padilla, E.: Mental Health Training and Public Health Manpower [Ross] 510-BR
Guyton, Arthur C.: Organ Physiology: Structure and Function of the Nervous System. First edition [Tipton] 317-BR
Hartstein, Jack: Current Concepts in Dyslexia [Mills] 257-BR
Hoff, E. Curtis: Preventive Medicine in World War II, Volume IX, Special Fields [Blount] 69-BR
Jawetz, Ernest; Melnick, Joseph L. and Adelberg, Edward A.: Review of Medical Microbiology. Tenth edition [Busey] 441-BR
Jennings, Lt. Gen. Hal B., Jr.: A Decade of Progress: The United States Army Medical Department, 1959-1969 [Blount] 403-BR
Krupp, Marcus A. and Chatton, Milton J.: Current Diagnosis and Treatment [Brisco] 171-BR
Minckler, Jeff: Introduction to Neuroscience [Currier and Clower] 477-BR
Myers, F. H., Jawetz, E., and Goldfien, A.: Review of Medical Pharmacology. Third edition [Rogers] 510-BR
Nashold, B. S., Jr., and Hrubec, Zdenek: Lumbar Disc Disease [Patrick] 221-BR
National Heart and Lung Institute Task Force on Arteriosclerosis: Arteriosclerosis. Volume 2 [Bennett] 361-BR
Pierog, S. H. and Ferrara, A.: Approach to the Medical Care of the Sick Newborn [Brann] 109-BR
Preston, Joseph A. and Troxel, David B.: Biochemical Profiling in Diagnostic Medicine [Weems] 317-BR
Raney, R. B., Sr., and Brashear, H. R., Jr.: Shands' Handbook of Orthopaedic Surgery [Corban] 109-BR
Smith, Donald R.: General Urology. Seventh edition [Weems] 441-BR
Booth, Bernard H., III
tapped by American College of Physicians, 236-N
Breast
aspiration of breast cysts [Martin] 255-E
Brown, Madison B.
named acting chief executive of AHA, 170-N
Brunini, Bishop Joseph B.
receives AMA medicine-religion award, 172-N
Burns
nutrition in the burned patient [Love] *391
Burroughs Wellcome Company
dedicates new building, 226-N

C

Calomel
poem [Bouton] 213-E
Cancer
See Carcinoma
Carcinoma
a new horizon in therapy: immunotherapy [Thompson] *6
ACS publishes hospital cancer programs list, 282-N
cancer conference set for Denver, 281-N
chondrosarcoma of the mandible [Love] *465
endometrial cancer detection improved, 119-N
Hodgkin's Disease—a curable malignancy [Morrison et al] *45
National Cancer Institute of NIH seeks referral patients, 259-N
National Cancer Institute seeks physicians' aid, 229-N
progress in cancer of the cervix in Mississippi [Boronow] *239
urologic cancer program planned, 262-N
Wisconsin plans chemotherapy conference, 282-N
Cardiology
cardiac instrumentation conference planned, 230-N
cardiologists opt for low-cholesterol meals, 220-N
exercise treadmill testing as an aid to work capacity [Hays and Lehan] *193
manpower study launched by ACC, 34-N
MHA plans cardiac seminar, 72-N
Cardiovascular Disease
office diagnosis of hyperlipidemia [Bennett] *285
Central Medical Society
Central has amphetamine moratorium [Kennedy] 20-E
opposes marijuana legalization, 118-N
Cervix
progress in cancer of the cervix in Mississippi [Boronow] *239
CHAMPUS
a new private look for CHAMPUS [Kennedy] 62-E
Army, Navy appoint advisors, 489-N
authorizes plastic surgery, 69-N
deductible must be satisfied, 26-N
explains separation eligibility, 121-N
is now under ASD (H and E), 439-N
rules on nonavailability, 122-N
Chemotherapy
Wisconsin plans conference, 282-N
Child Care Advisory Board
meets at MSBH, 460-N
Chiropractic
permissiveness and the chiropractic issue [Taylor] 212-E
the ghost and hoax of chiropractic licensure [Kennedy] 95-E
Cholesterol
cardiologists opt for low-cholesterol meals, 220-N
Chondrosarcoma
of the mandible [Love] *465
Clarksdale and Six Counties Medical Society
names officers, 322-N
Cleocin Palmitate
introduced by Upjohn, 30-N
Coast, Gulf
Coastal Medical Center is under construction in Gulfport, 457-N
Comprehensive Health Planning, Division of
AACHP sets December parley, 454-N

Dr. A. V. Beacham named to advisory council, 406-N
Connective Tissue Research
new journal begun, 367-N
Coronary Disease
direct coronary revascularization [Chavez and Conn] *1
Costilow, Millard S.
elected Mississippi Foundation for Medical Care president, 259-N
Council for Long-Term Care of Geriatric Patients
formed by the American Geriatrics Society, 401-N
Cysts
aspiration of breast cysts [Martin] 255-E

D

Davidson, Ezra C.
is SMA lecturer at UMC, 232-N
Deaths
Bailey, Julian T., 24
Bennett, Terry Lee, 316
Birchett, John A. K., Jr., 102
Bolton, Karl A., 256
Clark, Laurance James, Sr., 169
Coats, Filo Barclay, 474
Davis, Shed Hill, 64
Dawkins, William H., 508
Dillard, James B., 316
Gay, Emma Von G., 440
Kazar, Jay Justin, 64
Linder, Felix E., 256
Lipsey, James H., 24
Lowry, James L., Jr., 440
Magee, Thomas Edward, 440
Reynolds, William W., Jr., 474
Rutledge, Elise McLaurin, 169
Ryan, E. W., 474
Sayle, Robert P., 401
Smith, Carl A., Jr., 216
Stewart, Leo O., 401
Stowers, William Kurtz, 256
Street, A., 24
Tillman, Albert G., 401
Todd, Norman Wendell, 102
Tyrone, Nelson Otis, 169
Wilkins, William Thomas, 102
Delta Medical Society
holds semiannual meet, 507-N
Dermatology
Halotex introduced by Mead Johnson Laboratories, 235-N
Devices, Medical
FDA sponsors medical device hazard study, 411-N
Diabetes
Camp for juvenile diabetics planned, 509-N
Louisiana Camp for Diabetic Children plans second year, 232-N
Diaphragm
traumatic rupture of the diaphragm [Nelson] *394-RS
Disseminated Intravascular Coagulation
DIC [Wilson] *420
Drug Abuse
AMA explores complications, 473-N
Central Medical Society imposes moratorium on amphetamine use [Kennedy] 20-E
detection tests developed, 175-N
Jackson area launches planning program, 280-N
Drug Industry
new drug packaging announced, 76-N
relative efficacy [Stetler—PMA] *427
Drugs
AAP warns about weight gain drugs, 228-N
assault on antisubstitution [Kennedy] 63-E
help is needed on schedule II Rx's [Kennedy] 99-E
relative efficacy [Stetler—PMA] *427
Roerig announces new parasite drug, 177-N
use of drugs under the Mississippi Medicaid Program [Cobb et al] *81

E

Ear
management of the draining ear [Glasscock] *197
Education, Medical
the European brain drain and quest for excellence, 161-E
Upjohn offers new concept—Minitext, 31-N
Efficacy
relative efficacy [Stetler—PMA] *427
Emergencies
ACS holds emergency personnel course, 102-N
emergency care course slated at Memphis, 220-N
emergency room management of facial trauma [Smith] *415
Emergency Medical Care Unit (EMCU)
opens for eighth year, 71-N
Emory University School of Medicine
gets cancer center grant, 412-N
has enterostomal therapy training program, 118-N
institutes patient course, 28-N
med students train in family practice, 410-N
Endometrial Cancer
detection improved, 119-N
Enterostomal Therapy
Emory has training program, 118-N
Ethics, Medical
the ethics of credit card financing, 163-N
Exercise
exercise treadmill testing as an aid to work capacity [Hays and Lehan] *193
Experimental Medical Care Review Organization (EMCRO)
exhibit shown at MHA convention, 410-N
Massachusetts executive visits association's EMCRO, 120-N
national leaders visit association's EMCRO, 73-N
stress quality service and M.D. leadership, 25-N
Extra-Corporeal Technology
10th international congress set, 172-N

F

Facial Trauma
emergency room management of [Smith] *415
Family Planning
family planning and the health department [Tolbert] 312-E
UMC sets workshop, 172-N
Family Practice Specialist
department at UMC begun, 322-N
Emory has training program for medical students, 410-N
Fertility
American Fertility Society plans meeting, 76-N
Field, R. J., Jr.
cited by ACS Committee on Trauma, 237-N
Flying Physicians Association
president speaks at 104th Annual Session, 174-N
Food and Drug Administration
denies Achrocidin® stay motion, 122-N
Foundations for Medical Care
and EMCRO stress quality service and M.D. leadership, 25-N
The Mississippi Foundation for Medical Care [Davis] *332
Framingham Study
children of original participants invited to take part, 29-N
Freeland, Thomas E.
named dean of the UMC School of Allied Health, 375-N
Freeze, Wage and Price
effects of Phase II on medicine [Kennedy] 17-E
IRS clarifies M.D. wage-price controls, 488-N
Phase II and the M.D.: it's discrimination! [Kennedy] 97-E
Frontiers of Medicine Series
University of Chicago schedules, 411-N

G

Gastroenterology
ACP sponsors course, 29-N
course set for Montreal, 228-N
Glasgow, Joseph L.
tapped by ACP, 236-N
Gravlee Jet Washer
improves detection of endometrial cancer, 119-N
Guyton Memorial Medical Education Loan Fund
set up, 480-N
Gynecology
laparoscopy [Huggins and Exarchos] *491
progress in cancer of the cervix in Mississippi [Boronow] *239
the aggressive management of pelvic abscess [Kaplan and Jacob] *461

H

Halotex
dermatological product introduced by Mead Johnson Laboratories, 235-N
Health, Industrial
conference planned, 122-N
Health Care Delivery
Congress on the Socioeconomics of Health Care set, 112-N

Heart Disease
children of original Framingham study participants invited to take part, 29-N
direct coronary revascularization [Chavez and Conn] *1
Hematology
disseminated intravascular coagulation [Wilson] *420
Hodgkin's Disease: a curable malignancy [Morrison et al] *45
Hepatitis
chronic active liver disease, or hepatitis [Davis] *290
Hernia
diaphragmatic hernia: a cause of respiratory distress in the newborn [Moore] *330-RS
Hexachlorophene
AAP issues warning, 38-N
tragic misadventure with Hexachlorophene [Kennedy] 98-E
Hinds County Association for Mental Health
launches drug planning program, 280-N
Hip
total hip replacement operation: biomaterials and indications [Derian et al] *323
Hodgkin's Disease
a curable malignancy [Morrison et al] *45
Hospital Medical Staff, The
AHA publishes new journal, 122-N
Hospitals
ACS publishes hospital cancer program list, 282-N
hospital safety manual published, 452-N
Jackson area hospitals add more beds, offer specialized facilities, 511-N
national safety seminar scheduled, 164-N
Hull, Calvin T.
discusses abortion on radio station WJDX, 237-N
Hyperlipidemia
office diagnosis of [Bennett] *285
Hyperparathyroidism
presenting as nasal obstruction [Hilbun and Robertson] *388
Hypertension
UMC grant is extended, 526-N

I

Immunotherapy
a new horizon in cancer therapy [Thompson] *6
Industrial Medical Association
plans conference, 122-N
Infant Mortality
at record low in U. S., 489-N
Insurance, Automobile
no-fault coverage offers promise [Kennedy] 62-E
Insurance, Professional Liability
Aetna and West Virginia develop program, 444-N
forty-seven ways to be worse off [Kennedy] 19-E
Intensive Care Unit
UMC opens new unit, 32-N
Internal Revenue Service
clarifies M.D. wage-price controls, 488-N
offers toll free telephone service, 108-N
International College of Surgeons
plans Rome meeting, 226-N
International Society for Internal Medicine
sets 1972 congress, 68-N
International Society of Blood Transfusion
holds joint congress with AABB, 179-N
Interstate Postgraduate Medical Association
57th annual scientific assembly set, 369-N

J

Jackson Area
hospitals add more beds, offer specialized facilities, 511-N
launches drug planning program, 280-N
Jackson Medical Clinic
being planned, 361-N
Jaycees
and MSBH combat venereal disease, 402-N
Jones, Carl E.
receives heart study grant from HEW, 402-N
Journalist
discusses unusual set of values [Preston] 313-E

K

Kidney Foundation of Mississippi
medical advisory board members honored, 322-N

L

Laparoscopy
paper on [Huggins and Exarchos] *491
Learning Disabilities
the new problem [D'Alena] 472-E
Le Beau, Jacques
visits Medical Center, 509-N
Lederle Laboratories
Achrocidin® stay denied, 122-N
develop drug abuse detection tests, 175-N
Legislation
EMCU opens for eighth year, 71-N
the laws are passed at home [Kennedy] 61-E
Letters to the Editor
praise for maternal mortality article [Newton] 169-L
requesting case reports of allergic reactions [Frazier] 217-L
request for book material [Frazier] 169-L
Eli Lilly and Company
now uses safety-closure tops, 402-N
Lipid Disorders
office diagnosis of hyperlipidemia [Bennett] *285
Liver
chronic active liver disease, or hepatitis [Davis] *290
Linear Accelerator
radiation therapy with a linear accelerator [Morris] *86
Lotterhos, William E.
joins Georgia faculty, 318-N
Louisiana Camp for Diabetic Children
plans second year, 232-N
LSU School of Medicine
plans program with American Rhinologic Society, 370-N
Lungs
the shock lung, pathogenesis and treatment [Webb et al] *77

M

Malpractice
forty-seven ways to be worse off [Kennedy] 19-E
Mandible
chondrosarcoma of the [Love] *465
Marijuana
Central Medical Society opposes legalization, 118-N
Maternal Mortality
in Mississippi: a 13-year-report 1957-1969 [Wiener] *48
Mathews, Charles L.
appointed MSMA executive secretary, 316-N
McRae, John M., Jr.
chosen Ole Miss medical alumni president-elect, 368-N
Mead Johnson Laboratories
introduces Halotex, 235-N
introduces Pregestimil, 34-N
Measles
MSBH reports increased Red Measles incidence, 67-N
Medicaid
changes reported, 448-N
issues support data, 483-N
PSRO is enacted [Mathews] 471-E
use of drugs under the Mississippi Medicaid program [Cobb et al] *81
Medicare
PSRO is enacted [Mathews] 471-E
Medical Care Foundations
Dr. Millard S. Costilow elected MFMC president, 259-N
MFMC and EMCRO stress quality service and M.D. leadership, 25-N
Medical College of Georgia
Dr. W. E. Lotterhos joins faculty as head of department of family medicine, 318-N
Medical Education-Community Orientation (MECO)
plans orientation conference, 217-N
Medical Practice
changes in the practice of medicine [Dabney] 311-E
Mediphone
physicians saving lives by telephone [Bellows] *468
Members, New
Aldridge, Katherine A., 506
Aquino, Andres D., 506
Billups, William A., Jr., 400
Blissard, Thomasina, 400
Booth, Bernard Hess, III, 257
Braswell, Guy Ray, 164
Callahan, Joel Travis, 164
Chavez, Carlos Manuel, 360
Crosthwait, James Lewis, 164
Currie, Edward H., 23
Davis, Woody D., 506

Easley, William Franklin, 164
Elliott, Charles M., 214
Evans, John Wesley, 360
Evans, S. R., Jr., 315
Falker, James Benedict, 258
Giles, Hannelore H., 506
Harper, John R., 442
Hoagland, Robert Allison, 315
Johnson, William Cecil, Jr., 360
Landeen, James M., 506
Lehan, Patrick Hugo, 258
Longnecker, Morton Franklin, Jr., 258
Martin, Benjamin Franklin, III, 66
May, Robert O., 400
McCollum, Charles Ramsey, Jr., 104
McLeod, James N., 315
McMillan, Dean R., 258
Miller, John Hampton, 164
Moak, Wilson E., 258
Morgan, John Doyle, 474
Morrison, Francis Secrest, 104
Noblin, William Earl, III, 104
Pandeli, Anas, 257
Parker, William Harrison, Jr., 400
Pierce, Donald E., 23
Powell, Carroll E., 474
Pryor, Joseph A., 66
Read, Dale Gilbert, 104
Reed, Kenneth Noel, 258
Roe, Joseph Edward, 164
Ruff, James Edward, II, 315
Runnels, G. O., 360
Russell, James Randle, 214
Selman, Francis J., Jr., 506
Singley, Thomas R., 258
Smith, George Virgil, 258
Tabb, W. Granville, Jr., 164
Taylor, George Jessie, 104
Thompson, Robert Brock, 258
Treadwell, T. Walter, Jr., 164
Varner, Joseph Edwin, Jr., 104
Vise, Guy T., Jr., 259
Watkins, Billy Newman, 315
Weldy, Joseph F., 259
Wicker, Ralph Thomas, 360
Williams, John Ellis, 474
Williamson, Stoney, 66

Mental Health
Mississippi association meets, 526-N
programs seek state assistance, 456-N
two mental health centers in state are funded, 262-N

Methodist Rehabilitation Center
begun at UMC, 318-N

M. D. Anderson Hospital
sets virology symposium, 32-N

Mississippi Academy of Family Physicians
elects officers, holds annual meeting, 367-N

Mississippi Arts Festival
announces guest artists, 176-N
1972 Arts Festival set for April, 116-N

Mississippi (Society of American) Association of Medical Assistants
Central chapter offers medical terminology course, 217-N
hold annual meet, 263-N
holds first educational symposium, 175-N
named Dr. W. T. Oakes Physician of the Year, 322-N

Mississippi Association for Mental Health
meets, 526-N

Mississippi Foundation for Medical Care
and EMCRO stress quality service and M.D. leadership, 25-N
MFMC [Davis] *332

Mississippi Heart Association
announces 1973-74 research grants and fellowships program, 404-N
Dr. F. E. Tatum assumes presidency, 371-N
plans cardiac seminar, 72-N

Mississippi Hospital and Medical Service
holds annual meeting, 222-N

Mississippi Hospital Association
EMCRO exhibit shown at convention, 410-N

Mississippi Interagency Commission on Mental Illness and Mental Retardation
awards three developmental disabilities grants, 444-N

Mississippi Obstetrical and Gynecological Society
meets in Jackson, 476-N

Mississippi Public Health Association
governor addresses, 503-E
meets, 525-N

Mississippi Regional Medical Program
gives new contract awards, 485-N
pending grant applications, 178-N

Mississippi State Board of Health
address of the governor, 503-E
and Jaycees combat venereal disease, 402-N
APPG toxic psychosis reported, 455-N
begins new alcohol program, 445-N
Child Care Advisory Board meets, 460-N
family planning and the health department [Tolbert] 312-E
now records occupational injuries, 398-N
now tests baby turtles, 458-N
occupational safety act guides issued, 525-N
offers flu vaccine, 484-N
reports increased Red Measles incidence, 67-N
studies Reye's Syndrome, 454-N
warns about fire extinguishers, 473-N
warns about plastic cooking bags, 212-N
warns about Vibrio food poisoning, 26-N

Mississippi State Medical Association
address of the president [Brown] *296
Billy Guyton Memorial Medical Education Loan Fund set up, 480-N
Bishop Joseph B. Brunini receives AMA medicine-religion award, 172-N
Board of Trustees—handled full agenda at August meeting, 443-N
Central Medical Society—opposes marijuana legalization, 118-N
Clarksdale and Six Counties Medical Society—names officers, 322-N
Committee on Maternal and Child Care—publishes maternal mortality in Mississippi: a 13-year report 1957-1969 [Wiener] *48
Constitution and By-Laws, 301
Delta Medical Society—holds semi-annual meet, 507-N
EMCU opens for eighth year, 71-N
Experimental Medical Care Review Organization—and care foundation stress quality service and M.D. leadership, 25-N; EMCRO exhibit shown at MHA convention, 410-N; Massachusetts executive visits EMCRO, 120-N; national leaders visit association's EMCRO, 73-N
House of Delegates—handbook of 104th Annual Session, 157; text of proceedings, 335
104th Annual Session—official call and program, 131; will feature special inhouse television, 113-N; to feature Searle Medidata, 232-N; specialty societies, concurrent meetings highlight session, 173-N; FPA president to speak, 174-N; Dr. Jenkins is inaugurated president, Dr. Derrick is named president-elect, 265-N; specialty societies hold concurrent meetings, 270-N; Board of Trustees names 1972-73 officers, 277-N; dignitaries enjoy Ole Miss party, 276-N
105th Annual Session—Scientific Assembly begins work for '73, 276-N; Drs. Martin and Jenkins announce format for the 105th, 405-N
Mississippi Foundation for Medical Care—and EMCRO stress quality service and M.D. leadership, 25-N; Dr. Millard S. Costilow elected president, 259-N; MFMC [Davis] *332
MPAC—took three awards at AMPAC conference, 229-N
MSMA-Robins Award—announced, 27-N; Dr. Reginald P. White is recipient, 267-N
President's Page, Brown—'We Accept Mr. President,' 16; 'Constructive Communication,' 58; 'The M.D. Side of Quality,' 94; 'A Word of Warning,' 160; 'The Association's Year,' 210
President's Page, Jenkins—'Some Goals to Strive For,' 254; 'Department of Family Practice,' 310; 'Professional Standards Review Organization (PSRO),' 358; 'Mississippi Association of Medical Assistants,' 396; 'Change Without Trauma,' 436; 'A Comparison of Two Viewpoints,' 470; 'Continuing Medical Education,' 502
publishes RMP pending grants, 178-N
report of the Delegates to AMA, 437

N

Nasal Obstruction
hyperparathyroidism presenting as [Hilbun and Robertson] *388
National Cancer Institute
asks physicians' aid, 229-N
Emory gets cancer center grant, 412-N
seeks referral patients, 259-N
National League for Nursing
launches Friends of Nursing campaign, 236-N
National Migraine Foundation
headache research foundation established, 74-N
Neurological Disorders
new developments in the management of neck and back pain problems [Patrick] *39
Neurology
neurology clinics in outstate Mississippi [Haerer and Wiygul] *245
UMC can now determine anticonvulsant blood levels, 484-N
Neurosurgery
French neurosurgeon visits UMC, 509-N
UMC gets aneurysm study grant, 68-N
Neurotology
course set for Chicago, 483-N
Newborn Care
diaphragmatic hernia: a cause of respiratory distress in the newborn [Moore] *330-RS
New Orleans Graduate Medical Assembly
plans 35th annual meeting, 24-N
Nursing
St. Dominic gets training grant, 452-N
Nutrition
in the burned patient [Love] *391

O

Oakes, William T.
MAMA names Physician of the Year, 322-N
Obstetrics
laparoscopy [Huggins and Exarchos] *491
maternal mortality in Mississippi: a 13-year report 1957-1969 [Wiener] *48
obstetrics a la bankers' hours [Kennedy] 163-E
southern ob-gyn seminar scheduled, 221-N
Occupational Health
AMA schedules congress, 171-N
AMA sponsors congress, 372-N
MSBH now records occupational injuries, 398-N
Safety Act guides issued, 525-N
Ocean Springs Hospital
medical staff declares amphetamine moratorium, 174-N
Office of Economic Opportunity
AAP gets grant, 452-N
Ole Miss Medical Alumni
Billy Guyton Memorial Medical Education Loan Fund set up, 480-N
dignitaries enjoy party, 276-N
Dr. McRae chosen president-elect, 368-N
leaders meet, 318-N
Ophthalmology
learning disabilities—the new problem [D'Alena] 472-E
orbital blow-out fractures [Gieger] *500-RS
SMA ophthalmologists plan section meeting, 120-N, 369-N
the blind child [Hiatt] *249
University of Kentucky schedules pediatric ophthalmology meet, 439-N
Orthopaedics
total hip replacement operation: biomaterials and indications [Derian et al) *323
Otitis Media
management of acute otitis media in private pediatric practice [Coffey] *385
Otolaryngology
management of acute otitis media in private pediatric practice [Coffey] *385
management of the draining ear [Glasscock] *197

P

Parathyroid Adenoma
recognition through SMA-12 screening [Martin] 359-E
Patient Cup
new type of drug packaging, 76-N
Pediatrics
management of acute otitis media in private pediatric practice [Coffey] *385
the blind child [Hiatt] *249
University of Kentucky schedules pediatric ophthalmology meet, 439-N
University of Texas at Galveston hosts course, 454-N
Pelvic Abscess
the aggressive management of [Kaplan and Jacob] *461
Peer Review
PSRO is enacted [Mathews] 471-E
Personals
Abney, Robert L., 400
Adkins, Jerry R., 314, 315
Adyelott, Zed, Jr., 216
Alexander, Tommy, 23, 105
Allen, Clyde R., 400
Altman, Isaac V., 216, 400
Anderson, William J., 216
Anderson, William, III, 216
Anderson, William L., 256
Arens, James F., 365
Aycock, Larry B., 442
Azordegan, Albert, 508
Ball, Ottis G., 23, 216, 365
Barnes, H. B., 442
Barnett, Jim C., Jr., 216
Batson, Blair, 105
Batson, Hiram W. K., 442
Becker, Jasper B., Jr., 474
Begg, Robert B., 442
Bennett, Kenneth, 169
Benoist, Edwin E., 314
Bernfield, Helen C., 105
Berry, Sidney R., 315
Billups, William A., Jr., 442
Blake, Thomas H., 364
Blake, Thomas M., 474
Blakey, John M., 508
Bland, Griffin, 23
Blount, Richard L., 105
Boone, Gary, 23
Booth, Bernard, 400
Bouchillon, C. D., 400
Bowen, Frank W., 216
Bower, John D., 23, 474
Bowlus, William E., 216
Boyd, John W., 256
Bramlett, Julian, 105
Bratley, F. G., 474
Brown, George A., 105
Brown, J. A., 442
Brown, Raymond L., 400
Brumby, Paul B., 442
Burman, Richard, 169
Burrow, Nancy, 508
Burrow, W. Hollis, 442
Bush, Eugene A., Sr., 169, 256
Byarlay, John W., 105
Byrne, George W., 400
Cameron, Robert A., 169
Camp, Nath T., 442
Campbell, Guy D., 400
Campbell, Jack B., 216
Carey, F. T., 401
Carey, V. Frank, 23
Carr, William J., Jr., 314
Carroll, Andrew J., 216
Carroll, Reed, 169
Carruth, Edward L., 400
Carter, Robert, 169, 475
Chamberlin, Marshall, 442
Cheek, Howard B., 365, 508
Chung, S. J., 169
Clark, Richard H., Jr., 400
Cockrell, Marian E., 66, 474
Coffey, John D., Jr., 256
Colbert, Walter T., 400
Cole, Wilfred Q., 22
Conerly, Dawson B., Jr., 216
Conn, J. Harold, 508
Cooke, Maxwell C., 400
Cooper, Tom S., 442
Covington, Joe S., 105
Crawford, Walter, 256
Creekmore, Sam, 216
Crosthwait, James L., 442
Cunningham, James E., 508
Currie, Edward, 22
Dabbs, O. D., 442
Dabney, W. Moncure, 66
Daniel, Jack, 475
Davis, Bob, 23
Davis, Don S., 400
Davis, J. T., 474
Davis, Tommy M., 66
Davis, Woody D., 314
Dear, H. Davis, 442
Donald, Robert L., Jr., 105, 216
Donaldson, Joe, 364
Dyas, Edmund C., 400
Edwards, C. Mims, 216
Edwards, John B., 400
Enger, D. J., 169
Evans, John, 364, 400
Evans, John E., 105
Fairchild, Mack, 400
Feibelman, N. D., III, 365
Ferguson, James V., Jr., 216
Fortenberry, Frank R., 474
Fulcher, Harry, 474
Gable, Gerald P., 216
Gaddy, J. Hurd, 23
Gandy, Tom, 169
Garbin, Frank, 23

Giles, William G., 22, 401
Gillespie, Guy T., Jr., 474
Godbey, Marian H., 508
Goodlowe, William H., Jr., 365
Gordon, James D., 365, 508
Graves, Sidney, 216
Greer, Willie E., 364
Grissom, Charles E., 216, 442
Gruich, Frank G., 23
Griffin, Ruby B., 105
Guess, Charles D., 401
Gulledge, Jerry B., 66
Haerer, Armin F., 365
Hale, Carl Ray, 170
Hamilton, George C., 508
Hardy, James D., 169, 216, 314
Hargis, Robert J., 364
Harper, Robert B., 400
Harrell, Hector P., 216
Harrington, John N., 23
Harris, Elmer J., 23, 365
Harris, John, 216
Harrison, Charles H., Jr., 23
Harvey, Marvin V., 314
Hatten, Karl W., 508
Hays, James C., 400, 442
Head, Charles M., 365
Heidisch, Rita C., 442
Henderson, Robert P., 23, 365
Hendrick, Jim G., 23, 474
Hester, Clifton L., 23, 365
Hewitt, B. E., 400
Hey, John, 170
Hicks, G. Swink, 365
Hilbun, Benton M., 474
Hilbun, William M., 442
Hollingshead, C. A., 67
Hollis, Richard S., 169
Holman, Melvin R., 169
Hopkins, Gerald, 105
Hopson, W. B., Jr., 169, 365
Howard, James M., 509
Howorth, M. Beckett, Jr., 216
Howell, T. R., 67
Hull, Calvin T., 23
Hudgins, W. Robert, 67
Imrie, D. T., 365, 508
Janet, Hansel, 442
Janes, Julian, 509
Jaquith, W. L., 400
Jenkins, Charles R., 256, 508
Johnson, Ben B., 23
Johnson, Edgar D., 216
Johnson, H. Richard, 105
Johnson, Samuel B., 314
Johnson, W. Cecil, 216
Johnston, J. Harvey, Jr., 315
Kety, S. S., 66, 442
Killelea, Donald, 23, 169
King, Bobby F., 315
Kluck, John J., 216
Kobs, Darcey G., 170
Krestensen, James G., 400
Kuljis, Joseph, 66
Lake, Wesley W., Sr., 105
Lamothe, George, 105
Landeen, James M., 170
Lane, Dewey H., Jr., 66, 474
Langlow, John R., 365
Lassen, Raymond V., Jr., 169
Levens, John B., 105
Levi, Sam, 23
Lewis, C. James, 216
Lindsey, W. A., 508
Lipscomb, Lewis D., 256
Lobrano, William, 400
Long, Lawrence W., 315
Long, William A., Jr., 105, 256
Longest, John C., 105, 256
Lorentz, R. J., 315
Lotterhos, William E., 170
Love, Robert T., 105, 365
Lucas, John F., Jr., 105
Mangin, C. E., 508
Mann, John E., 401
Manning, James O., 365
Markette, J. R., 170
Martin, George H., 365
Massie, James Dan, 365
Masterson, C. W., 365
Matthews, James C., Jr., 364
May, Robert O., 105
Mayfield, James R., 474
McDonnell, Thomas F., 66
McEachin, John D., 442
McFadden, John W., 365
McFarland, Wesley, 23
McGee, R. R., 508
McMillan, Mabry S., 105, 442
McPherson, F. T., 365
McQueen, James N., 365
McVey, Eric A., Jr., 23, 400
Miller, Richard C., 508
Mills, Henry P., 216
Mitchell, John P., Jr., 105
Moffitt, Ellis, 400
Montgomery, D. C., Jr., 442
Moore, Merwin B., 216
Moore, Paul H., 508
Morgan, Frank J., Jr., 474
Morgan, John D., 23, 442
Morrison, Margaret, 508
Murphree, L. R., 475
Nassar, George, 170
Neill, Walter, 365
Nelson, Phil O., Jr., 400
Nix, J. Elmer, 315
Norman, Joe, 400
Norris, Jim G., II, 400
Oliver, Dalton S., 442
O'Neal, Marcelene J., 256
Oser, W. W., 105
Owen, David M., 365
Owen, J. Lee, 401
Owens, R. Jennings, 216
Pace, Brantley B., 508
Packer, James M., 23, 365
Patino, Gilberto, 365
Patrick, Bernard S., 508
Patton, C. E., 256
Perry, A. R., 365
Pettis, J. Leighton, 401
Pittman, James A., 216
Proctor, Camilla A., 400
Pruitt, Charles, Jr., 315
Pugh, Glenn, 475
Pullen, Jeanette, 400
Purvis, George D., 365
Raju, Sybil, 23
Randall, Charles C., 23
Ratcliff, James Craig, 475
Ratliff, Jack, 400
Rayner, Hugh S., 216
Reed, Kenneth N., 365, 508
Reeves, Ernest P., 508
Reikes, Dan, 170
Rester, Robert, 508
Riemann, E. T., Jr., 23
Riley, William G., 442
Risher, F. Lindsey, 170
Ritter, Robert M., 508
Roberts, Curtis, 508
Robinson, George R., 442
Robinson, William Thomas, Sr., 401
Rogers, Lee H., 475
Ross, Joe M., Jr., 315, 365
Ross, T. G., 315
Rubenstein, Louis, 23
Russell, Richard, 216
Samson, Roland, 508
Sanders, William C., 170
Sartin, Jack, 401
Scanlon, Leo, Jr., 23, 216
Schiefer, Martin A., 315
Schmidt, Harry J., Jr., 315
Schmidt, Robert J., 66
Schunior, Richard J., 315
Selman, F. J., Jr., 442
Senter, Jack, 217
Sharbrough, R. F., 365
Shaw, Boyd, 474
Sigrest, M. L., 475
Simmons, Omar, 401
Simpson, Tommy T., 401
Sloan, Robert D., 216
Smith, J. George, 365, 508
Smith, M. Shelby, 401
Smith, Perrin N., 23, 256
Smith, Robert, 365
Sneed, Ralph, 365
Spears, Dalton, 105
Spell, Bobby G., 315
Spencer, William A., 442, 475
Stacy, A. Jack, Jr., 508
Starr, Arthur J., 169
Stauss, H. K., 401
Steinberg, Martin H., 365
Stevens, William, III, 442
Stewart, Edsel, 442
Stewart, W. K., 400
Stith, J. L., 23
Strauss, Charles E., 170
Tabb, W. Granville, Jr., 216
Talkington, Thomas W., Jr., 170, 401
Tatum, Frederick E., 315
Tatum, Jetson P., 315
Thaggard, Lamar, 400
Thomas, Boyce, 365
Thompson, Bob G., 67
Thompson, James Grant, 475
Thompson, William B., 105, 365
Thompson, Will P., 475
Tharp, Charles P., 365
Thornton, William Lewis, 170
Trapp, James T., 508
Truett, George W., 365
Turner, Thomas C., 365
Tyler, Henry B., 216
Tyson, Robert E., 105
Van Dyke, Margaret, 401
Vanlandingham, David J., 67, 474
Varela, Paul Y., 364
Varner, Joseph E., Jr., 216
Vick, Walter Dean, 67
Vise, Guy T., Jr., 365, 475
Waddell, James, 475
Walker, Joe W., 105, 442
Walker, John W., 475
Warner, William C., 256
Warrington, James, 401
Warrington, Paul, 401
Watkins, Billy N., 401
Watkins, Clyde A., 105
Watts, James A., 217, 401
Welch, Carl, 105
Welch, Jerry W., 442
Werkheiser, F. E., 401

Wesson, Ray L., 23, 105, 170, 475
Wesson, Thomas W., 401
White, A. R., Jr., 508
White, E. A., III, 23
White, Earl T., 475
White, Reginald P., 105, 315, 401
White, W. B., 67
Wilder, S. Jobe, Jr., 401
Williams, Cecil T., Jr., 217
Williford, J. Stewart, 401
Winkler, M. M., Jr., 365
Wiygul, Frank M., 23
Wofford, Jesse, 400
Wofford, John D., 23, 170
Womack, Noel C., Jr., 315
Wood, F. A., 508
Wood, J. O., 509
Yawn, Victor W., 401
Young, John R., 215

Pesticides
may be linked to impotency, 458-N
Pharmacists
help is needed on schedule II Rx's [Kennedy] 99-E
Pharmaceutical Manufacturers Association
foundation announces grants, 407-N
offers faculty awards, 448-N
relative efficacy [Stetler] *427
traces antisubstitution laws in new booklet, 366-N
Phase II
and the M.D.: it's discrimination! [Kennedy] 97-E
Physical Therapy
career film is available, 38-N
Physicians
the European brain drain and the quest for excellence [Kennedy] 161-E
the physician and minister caring for the terminal patient [Ratliff] *202
Physicians Assistants
UMC begins training program, 490-N
Population
the population dilemma [Dabney] 360-E
Postgraduate Calendar
featured on pages 21, 64, 100, 168, 213, 316, 364, 399, 440, 475, 506
Pregestimil
introduced by Mead Johnson for babies with malabsorption problems, 34-N
Professional Consultants
roster published, 263-N
Professional Standards Review Organizations
PSRO [Jenkins] *358-PP
PSRO is enacted [Mathews] 471-E
Psychopharmacology
course planned at Duke, 235-N

Q

Quality of Life
AMA plans congress, 120-N

R

Radiologic Seminars
CXIII: Empty Sella Turcica [Rone] *14
CXIV: Unfused Odontoid [Rone] *56
CXV: Tuberculosis of the Wrist [Gieger] *90
CXVI: Pelvic Vein and Inferior Vena Caval Thrombosis: A Case Report [Lynch] *128
CXVII: Bladder Diverticula and Herniations [Sullivan et al] 208
CXVIII: Laryngography [Ellis] *251
CXIX: Diaphragmatic Hernia: A Cause of Respiratory Distress in the Newborn [Moore] *330
CXX: Traumatic Rupture of the Diaphragm [Nelson] *394
CXXI: Hemomediastinum Associated with Anticoagulant Therapy [Packer] *434
CXXII: Orbital Blow-out Fractures [Gieger] *500
Radiology: See Radiologic Seminars.
radiation therapy with a linear accelerator [Morris] *86
Raju, Seshadri
named assistant professor of surgery at UMC, 108-N
Rawson, John E.
receives SMA research grant, 372-N
Regional Medical Programs: See Mississippi RMP.
Memphis RMP gets federal grant, 365-N
Rehabilitation
Methodist Rehabilitation Center begun at UMC, 318-N
Rehabilitation for the Blind Center opened at UMC, 316-N
Religion (and Medicine)
Bishop Joseph B. Brunini receives AMA medicine-religion award, 172-N
the physician and minister caring for the terminal patient [Ratliff] *202
Respiratory Distress
caused by diaphragmatic hernia in the newborn [Moore] *330-RS
Revascularization
direct coronary [Chavez and Conn] *1
Reye's Syndrome
MSBH studies it, 454-N
Rheumatism
rigors, risin's and rheumatism in a rose raiser: disseminated sporotrichosis [Morgan] *293
Robins, A. H. Company
1972 Robins-MSMA award contest announced, 27-N
Dr. Reginald P. White is recipient, 267-N
Roerig, Division of Pfizer Pharmaceuticals
announces new parasite drug, 177-N
Rorer Awards
American College of Gastroenterology announces 1972 contest, 228-N

S

Safety
hospital safety manual published, 452-N
national hospital safety seminar scheduled, 164-N
slaughter on the Mississippi highways—must it continue? [Wesson] 397-E
St. Dominic-Jackson Memorial Hospital
gets nursing grant, 452-N
nears completion of $17 million program, 319-N
Searle, G. D. Company
Medidata featured at MSMA 104th Annual Session, 232-N
Sexuality
human sexuality program offered, 236-N
Sheen Award
deadline announced, 67-N
Sickle Cell Anemia
new test developed, 366-N
Smallpox Vaccination
new requirements given by USPHS, 36-N
Socioeconomics
Congress on the Socioeconomics of Health Care set, 112-N
Southern Medical Association
Dr. Ezra C. Davidson is SMA lecturer at UMC, 232-N
Dr. John E. Rawson receives research grant, 372-N
Dr. J. T. Nelson is president-elect, 482-N
ophthalmologists plan section meeting, 120-N, 369-N
plans 66th annual meeting, 485-N
SMA-12 Screening
parathyroid adenoma recognition [Martin] 359-E
Southern Ob-Gyn Seminar
scheduled for July, 221-N, 259-N, 315-N
Sporotrichosis
rigors, risin's and rheumatism in a rose raiser: disseminated sporotrichosis [Morgan] *293
Sports
AAOS sponsors course on knee in sports, 214-N
football injury program held in Gulfport, 456-N
physicians invited to coaches' conference, 70-N
sports medicine meeting planned, 38-N
Stings
venomous bites and stings in Mississippi [Keegan] *495
Student American Medical Association
announces 22nd annual meeting, 117-N
Surgery
aspiration of breast cysts [Martin] 255-E
chondrosarcoma of the mandible [Love] *465
direct coronary revascularization [Chavez and Conn] *1
hyperparathyroidism presenting as nasal obstruction [Hilbun and Robertson] *388
the aggressive management of pelvic abscess [Kaplan and Jacob] *461
the shock lung: pathogenesis and treatment [Webb et al] *77
total hip replacement operation: biomaterials and indications [Derian et al] *323

T

Tatum, Frederick E.
assumes MHA presidency, 371-N
Tatum, Jetson P.
is ACC Fellow, 317-N
Terminal Patient
the physician and minister caring for the terminal patient [Ratliff] *202
Thorn, George W.
visiting professor of medicine at UMC, 229-N
Trauma
emergency room management of facial trauma [Smith] *415
Treadmill, Exercise Testing
as an aid to work capacity [Hays and Lehan] *193
Tuberculin Test
as a routine office procedure [Reid] *123
Tuberculosis
the tuberculin test as a routine office procedure [Reid] *123
tuberculosis of the wrist [Geiger] *90-RS
Tupelo
regional evaluation and training center is funded, 456-N
Tusken, Roger
named AAFP executive director, 36-N

U

United States Public Health Service
gives new smallpox vaccination requirements, 36-N
University of Alabama Medical Center at Birmingham (UAB)
creates a department of biocommunication, 232-N
University of California School of Public Health at Berkeley
announces postgraduate courses, 229-N
University of Illinois
expands medical school campuses, 490-N
University of Kentucky
schedules pediatric ophthalmology meet, 439-N
University of Mississippi School of Medicine (UMC)
adds Drs. Raju and Vise to faculty, 108-N
adds five to faculty, 410-N
announces faculty changes, 74-N
announces graduation activities, 217-N
announces staff changes, 452-N
begins physicians assistant program, 490-N
Billy Guyton Memorial Medical Education Loan Fund set up, 480-N
Blind Center opened, 316-N
Dr. Ezra C. Davidson is SMA lecturer, 232-N
Dr. George W. Thorn is visiting professor of medicine, 229-N
Dr. James F. Arens appointed new anesthesiology department head, 227-N
Dr. T. E. Freeland named dean of School of Allied Health, 375-N
family practice department begun, 322-N
French neurosurgeon visits, 509-N
gets aneurysm study grant, 68-N
graduates 80 physicians, 321-N
has freshman class of 116, 457-N
hypertension grant is extended, 526-N
lists faculty changes, 370-N
Methodist Rehabilitation Center begun, 318-N
now has facilities to determine anticonvulsant blood levels, 484-N
nurse anesthetist program moves, 526-N
opens new intensive care unit, 32-N
receives AMA-ERF check from MSMA, 280-N
School of Allied Health changes name to School of Health Related Professions, 454-N
seeks dean for School of Allied Health, 112-N
sets family planning workshop, 172-N
University of Texas at Galveston
hosts pediatrics course, 454-N
University of Wisconsin
plans chemotherapy conference 282-N
Upjohn Company
introduces Cleocin Palmitate, 30-N
markets device to improve detection of endometrial cancer, 119-N
offers new medical education concept, 31-N
Urology
bladder diverticula and herniations [Sullivan et al] *208-RS
urologic cancer program planned, 262-N

V

Venereal Disease
AAP urges consent laws be passed, 368-N
combatted by Jaycees and MSBH, 402-N
Vicksburg
initiates screening program, 27-N
Viruses
M. D. Anderson hospital sets virology symposium, 32-N
Vise, Guy T., Jr.
appointed assistant professor of orthopaedic surgery at UMC, 108-N

W

West Virginia State Medical Association
develops professional insurance program with Aetna, 444-N
Wildgen, J. J.
is new AAFP president, 28-N
Work Capacity
exercise treadmill testing as an aid to [Hays and Lehan] *193

X

X-Ray
mobile x-ray policy changed, 278-N

AUTHOR INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "L," Letters to the Editor; "PP," President's Page; "RS," Radiologic Seminar; "BR," Book Review. The asterisk (*) indicates an original article in the JOURNAL.

A

Abide, John M., *81
Abney, Robert L., III, 403-BR

B

Bellows, John G., *468
Bennett, Kenneth R., *285, 361-BR
Blount, Robert E., 69-BR, 403-BR, 477-BR
Boronow, Richard C., *239
Bouton, Ralph L., 213-E
Brann, Alfred W., Jr., 109-BR
Brisco, Lawrence H., 171-BR
Brown, Arthur E., 16-PP, 58-PP, 94-PP, 160-PP, 210-PP, *296
Busey, John F., 441-BR

C

Chavez, Carlos M., *1
Clower, Ben R., 477-BR
Cobb, Alton B., *81
Coffey, John D., Jr., 385
Conn, J. Harold, *1
Corban, Magruder S., 109-BR
Currier, Robert D., 477-BR

D

Dabney, W. Moncure, 211-E, 311-E, 256-E, 360-E
D'Alena, Peter R., 472-E
Davis, J. T., *332
Davis, William D., Jr., *290
Derian, Paul S., *323
Dill, A. Robert, 69-BR
Dreiling, Bernard J., *45

E

Ellis, Clyde A., *251-RS
Exarchos, Thano, *491

F

Frazier, Claude A., 169-L, 217-L

G

Gieger, Edward L., Jr., 90-RS, 500-RS
Glasscock, M. E., III, *197

H

Haerer, A. F., *245
Hays, James C., *193
Hiatt, Roger L., *249
Hilbun, Benton M., *388
Huggins, George R., *491
Hurst, Marion F., *208-RS

J

Jackson, John R., Jr., 171-BR
Jacob, Warren, *461
Jenkins, Charles R., 254-PP, 310-PP, 358-PP, 396-PP, 436-PP, 470-PP, 502-PP

K

Kaplan, Alan L., *461
Keegan, Hugh L., *495
Kennedy, Rowland B., 17-E, 19-E, 20-E, 59-E, 61-E, 62-E, 63-E, 95-E, 97-E, 98-E, 99-E, 161-E, 163-E

L

Lehan, Patrick H., *193
Love, Robert T., Jr., *391, *465
Luing, Ramon R., *208-RS
Lynch, W. F., Jr., *128-RS

M

Martin, George H., 255-E, 359-E
Massey, Fred M., *323
Mathews, Charles L., 471-E
Mills, Henry P., Jr., 257-BR
Moore, Paul H., *330-RS
Morgan, John D., *293
Morris, Jerry, *86
Morrison, Francis S., *45
Murakami, T., *77

N

Nelson, Phil O., *394-RS
Newton, Michael, 169-L

P

Packer, James M., *434-RS
Patrick, Bernard S., *39, 221-BR
Philpot, Van B., Jr., 361-BR
Preston, Howard, 313-E

R

Ratliff, L. C., *202
Reid, Lee R., *123
Robertson, Brown, *388
Rogers, Joseph B., 510-BR
Rone, W. L., *14-RS, *56-RS
Ross, Jerry M., 510-BR

S

Saffold, John H., 438-E
Siegel, Edward, 256-E
Smith, J. George, *415
Steinberg, Martin H., *45
Stetler, C. Joseph, *427
Sullivan, A. Wayne, *208-RS

T

Tatum, W. T., Jr., *45
Taylor, C. D., Jr., 212-E, 437-E
Taylor, Walter T., 257-BR
Thompson, R. B., *6
Tipton, A. C., 317-BR
Tolbert, Virginia, 312-E
Truett, George, *323
Tyson, Robert E., 221-BR

W

Waller, William L., 503-E
Wax, Stennis D., *77
Webb, Watts R., *77
Weems, William E., 317-BR
Weems, W. L., 441-BR
Wesson, Thomas W., 397-E
Wiener, William B., *48
Wilson, Donnie P., *81
Wilson, William B., *420
Wiygul, F. M., *245

TABLE OF PAGES

January	1 to 38	June	239 to 284	December	491 to 526
February	39 to 76	July	285 to 322	By-Laws of the Association	301 to 308
March	77 to 122	August	323 to 384	Transactions of the House of Delegates	335 to 355, 376 to 384
April	123 to 192	September	385 to 414		
May	193 to 238	October	415 to 460		
		November	461 to 490		

Miss. Public Health Association Meets

The Mississippi Public Health Association held its thirty-fifth annual meeting Oct. 18-20 at the Heidelberg Hotel in Jackson.

Theme of the meeting was "Public Health: A Part of the Community."

Highlighting the meeting was an address by Governor William L. Waller. (This address is printed in its entirety on page 503.)

Other guest speakers were The Honorable J. P. Coleman, Judge of the U. S. Fifth Circuit Court of Appeals, who spoke on "Public Health—A Part of the Community"; Dr. Alton B. Cobb, director of the Mississippi Medicaid Commission, who discussed "Community Involvement in Health Care Delivery"; Dr. Reginald P. White of Meridian, director of the East Mississippi State Hospital, who talked on "Drug and Drug Abuse Problems in Mississippi"; and Frances J. Goldsmith, Ph.B., Special Assistant to the Administrator, Health Services Department of HEW, Washington, D. C., who discussed "New Environmental Health Problems."



Gov. Bill Waller addressed the annual meeting of the Mississippi Public Health Association Oct. 19 at the Heidelberg Hotel.

In addition to the general sessions, the administrative, public health nursing, clerical, community health services, sanitation, and epidemiology sections of MPHA held meetings.

New officers of the public health association are Dr. Durward L. Blakey of Jackson, president; Joe D. Brown of Jackson, president-elect; Dr. Alfio Rausa of Greenwood, chairman of administrative section; Hubert Walley of Hattiesburg, chairman of sanitation section; Eddie Funte of Jackson, chairman of community health section; Mrs. Gladys Harris of Jackson, chairman of clerical section; and Ken Williams of Meridian, chairman of epidemiology section.

Immediate past president is Albert K. Monroe of Starkville.

Occupational Safety Act Guides Issued

"The recordkeeping system initiated by the new Occupational Safety and Health Act should not be burdensome to business firms in the state," Dick Whitehead, director, Division of Occupational Safety and Health, State Board of Health, stated recently.

He explained that the system consisted of listing all occupational injuries and illnesses which occurred in an establishment, a supplementary record for each injury or illness, and at the end of the year a summary report of these.

"If an establishment has no injuries or illnesses to report, only one form—OSHA 102, must be completed with *NONE* written across the report form," Whitehead said. "This form should be signed by the employer and posted in a place readily accessible to all employees," he added. All forms should be maintained at the individual establishment and should not be mailed to any agency of the government.

Dr. Hugh B. Cottrell, State Health Officer, noted that businesses should contact the Division of Occupational Safety and Health, 2628 Southerland, Jackson, for further information or assistance.

In addition, the Small Business Administration is offering loan assistance for firms that need financial help in order to comply with this new law. Interested persons may contact the Jackson office at the Petroleum Building, Room 690, or write the Small Business Administration, P. O. Box 2351, Jackson, 39205.

UMC Nurse Anesthetist Program Moves

The University Medical Center nurse anesthetist training program has moved from a hospital-based program to part of the new University of Mississippi School of Health Related Professions.

Dean Thomas E. Freeland made the announcement of the change, which was effective Nov. 1.

Mrs. Nera O'Conner has been named acting head of the clinical nursing specialty training program, which begins a new class in May.

Miss. Mental Health Association Meets

Two physicians were key program figures at the annual meeting of the Mississippi Association for Mental Health, held in Jackson Oct. 24. Dr. Reginald P. White, director, East Mississippi State Hospital at Meridian, and Dr. Nina Goss-Moffit, director, Mental Health Services, Mississippi State Board of Health, Jackson, were two of the six-member panel who "reacted" to a graphic presentation of State Mental Health Services, prepared by Monsignor Bernard F. Law, former MAMH president, with the assistance of ETV.

The presentation, which preceded the discussion, was entitled, "Will We Make a Difference?," and emphasized improving services, expanding services, and promoting services.

Other panelists were: Paul Cotten, director, Ellisville State School; Dr. Gilbert S. Macvaugh, Jr., director, Delta Mental Health and Mental Retardation Center; Levin Farmer, chairman, Mental Health Subcommittee, Governor's Committee on Comprehensive Health Planning; and Harry Scott, executive director, Mississippi Association for Retarded Children.

Keynote speaker for the morning session was Brian O'Connell, executive director of the National Association for Mental Health, who told his audience:

"Citizens who can and do make a difference are clearly the chosen ones. A lot of people have a cause but few have a basic organization behind them. We (the mental health organization) are viewed by Congress, the White House, the Department of Health, Education and Welfare as influential. We have to acknowledge that we still have problems . . . and that we haven't come as far as we'll one day be able to say we have. It's time to begin to behave with the independence of people who have proven what they can do." O'Connell noted that the record of the national and state mental health associations is "too good to put up with hangers-on . . . and malcontents."

The luncheon speaker was Dr. Dale Farabee, commissioner of the Kentucky Department of Mental Health, who said:

"Through tremendous efforts we were able to convince the public that something had to be done about storing human beings in mausoleums or barns and calling them hospitals. We are at the crossroads. We are at a point where we must identify our role, decide where we are and what we are doing."

A special guest was Mrs. William Waller, Mississippi's First Lady, who has signified her vital interest in Mississippi's mental health program.

New officers, installed at the luncheon by Levin Farmer, past MAMH president and current national delegate director, were: R. D. O'Connor, Jr., of Florence, reelected president; Ralph Sowell, Jr., first vice president; Mrs. S. M. Montgomery of Rolling Fork and Barney Heflin, reelected secretary and treasurer, respectively; and Dr. James Mann of University and Mrs. Albert Mitchell of Jackson, regional vice presidents.

Preceding the all-day meeting was a Leadership Session for chapter personnel and the Board of Directors. Dr. Dorothy Moore, program director, Mississippi Interagency Commission on Mental Illness and Mental Retardation, brought the group up to date on the present status of community mental health centers in Mississippi at this session.

Program Chairman was Dr. A. J. Comfort, Jr., coordinator, Title I, ESEA, of Brandon, and Miss Mary Ann Elkin, health education, Mississippi State Board of Health, Jackson, was in charge of arrangements for the two-day session.

UMC Hypertension Grant Is Extended

HEW's National Heart and Lung Institute (NHLI) has awarded five new contracts totalling $1.9 million and extended 10 existing contracts totalling $4.4 million to expand the Hypertension Detection and Follow-up Program (HDFP) which it initiated last year. Dr. Herbert G. Langford of the University of Mississippi Medical Center at Jackson received an extension grant of $530,100.

With the addition of five clinical centers to the 10 that are already cooperating in the program, the HDFP prepares to enter its second

major phase—to determine the efficacy of anti-hypertensive therapy for a total of 10,500 persons who are found to have hypertension in the communities in which this program will be carried out.

This program is one of the three which Dr. Theodore Cooper, NHLI director, singled out last December for highest immediate priority from 44 programs recommended by the NHLI Task Force on Arteriosclerosis. The information to be gained from the HDFP will contribute significantly to the recently initiated planning for a National Hypertension Program, a cooperative informational and educational effort involving various federal, state and private agencies.

The HDFP represents a major effort to bring to the community the fruits of years of research on high blood pressure. The previous research has yielded effective agents to reduce high blood pressure and long-term prospective studies have confirmed that even modest elevation of blood pressure is associated with significant risk of heart disease, stroke and kidney disease.

Published research data from the Veterans Administration Cooperative Study of Hypertension demonstrated that a significant reduction in deaths and illness can be attained by treating men with moderate elevation of diastolic blood pressure (consistently over 105 mm Hg) when therapy was continued over several years.

The challenge addressed by the HDFP is to determine the benefits of anti-hypertensive therapy in the whole spectrum of those with elevated blood pressure in community-based populations, including women, younger individuals, and many in whom no damage to heart or kidney is yet apparent.

Each of the program's clinical centers will be screening a geographically defined population or industrial group. Thus each center will screen 8,000 to 12,000 people aged 30 to 69, to detect the estimated 800 to 1,000 who would be expected to have hypertension and participate in the program. The first phase, still in progress, is concerned with determining adequate methods for detection of hypertensive persons and their motivation to continue under appropriate treatment.

In phase II of the program, the centers will collaborate in determining the effectiveness of the therapy in controlling the blood pressure, and the extent to which the disability and death associated with hypertension are thereby reduced. To accomplish this requires not only several years of time (e.g. the time-lag from onset of damaging pressure elevation to heart, brain or kidney damage) but also enough cooperating participants for a statistical demonstration of the benefits.

Phase II plans are now being pre-tested and will be implemented by principal investigators in each of the clinical centers beginning in January. A Coordinating Center at the University of Texas is responsible for supervising training of home interviewers and blood pressure technicians and for analysis, storage and retrieval of all data relating to the protocol of the program.

Index to Advertisers

American Medical Association 14B

Beecham-Massengill Pharmaceuticals 505, 507, 509
Burroughs Wellcome and Co. 494B

Geigy Pharmaceuticals 10A

Hill Crest Hospital 12

Kay Surgical, Inc. 18

Eli Lilly and Company front cover, 18D, 510A, 510B

MPAC 15
MSMA 11

PAS 7
Pharmaceutical Manufacturers Association 18A, 188, 18C
Wm. P. Poythress and Co. 8

Roche Laboratories second cover, 3, 16, 17, fourth cover

G. D. Searle and Co. 502B, 502C, 502D
Smith Kline and French 502A

The Upjohn Company 108, 10C, 10D, 494A

Wallace Pharmaceuticals 14, 14A
Woodward Academy 6

Thomas Yates and Company third cover

IN CONCLUSION

An Ad Hoc Committee on Membership has been formed by the American Associatio of Medical Society Executives to assist the AMA in strengthening membership activities at all levels of organized medicine. It will work with AMA in devising improved methods for attracting, retaining and servicing a growing membership. As a starting point, the committee and AMA will review existing membership promotion and services, as well as current billing, collection an reporting procedures.

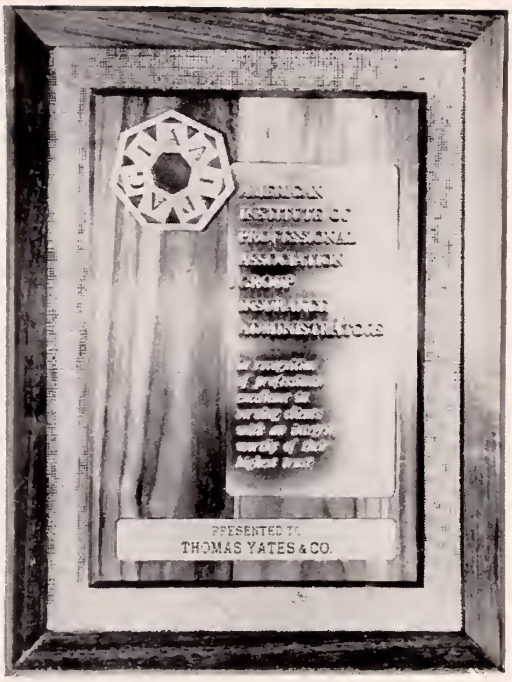
FDA has published an order (October 28, 23105) broadening sterility requirements of ophthalmic preparations to include ophthalmic ointments. Ophthalmi ointments have not been included because of difficulties in production and lack of reliable methods to determine sterility. FDA has now determined tha it is in the interest of public health to extend the sterility requirement t all human and veterinary ophthalmic ointments. Effective date for the regulation is 12 months from publication date.

More than 8 million units of blood for transfusion were drawn last year by 4,566 blood banks and transfusion facilities that participated in 1972 AMA survey. Based on findings of a telephone canvass made of a sampling of non-participating facilities, it is estimated that survey participants accounted for approximately 95% of the units of blood drawn in 1971. Data was obtaine by the AMA Committee on Transfusion and Transplantation and will be publishe later this year.

The American Academy of Pediatrics has employed 10 health liaison specialist as an extension of the AAP Head Start Medical Consultation Program initiated in 1967. The specialists will make follow-up visits to local Head Start projects nationwide, assist program personnel and resolve problems that have been identified by AAP medical consultants. They joined the academy staff under a new contract signed by the AAP in February with the Office of Child Development of HEW.

In cooperation with the Health Law Center of Aspen Systems, Inc., of Pittsburgh, the American College of Emergency Physicians (ACEP) will sponsor six Emergency Department Legal Institutes during the next year. The institutes will feature law as it relates to the emergency physician and attendance will be limited to 150 physicians. Southern physicians will be interested in the institute scheduled Dec. 6-7, 1973, at the Fairmont Roosev Hotel in New Orleans.

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